PERFORMING INDETERMINACY:
AN INTERNATIONAL CONFERENCE

Friday 30 June – Sunday 2 July 2017
School of Music, University of Leeds

Welcome

Dear colleagues and friends,

It is our pleasure to welcome you to *Performing Indeterminacy*, an international conference held at the University of Leeds, in collaboration with the University of Huddersfield, between 30 June and 2 July 2017.

The conference addresses the performance of indeterminate and experimental musics as its central theme, and is intended as a forum for the exchange of perspectives from musicologists, performers, composers, and a wider audience. By fostering dialogue and debate about the performance of indeterminate music in its many manifestations, through papers, practice-based contributions, and musical performances, we hope over the next several days to contribute to broadening understandings of a music which remains at the margins of performance studies, and to ask challenging questions about where the limits of performance and composition lie. We are especially delighted to welcome Catherine Laws, Benjamin Piekut and Christian Wolff as our keynote speakers, whose work has inspired us over many years.

The conference is part of the research programme of the AHRC-funded project, 'John Cage and the *Concert for Piano and Orchestra*' and includes a performance of John Cage's *Concert for Piano and Orchestra* (1957–58) as well as the world premiere of Christian Wolff's *Resistance*, performed by Apartment House.

We are excited to welcome you to Leeds in person, to hear your contributions, and to engage in rich conversation and debate over the coming days.

Philip Thomas, Chris Melen, Martin Iddon and Emily Payne
The Conference Committee
cageconcert.org

Contents

Schedule at a glance

- Parallel sessions: A sessions will take place in Lecture Theatre 1 (LT1); B sessions will take place in Lecture Theatre 4 (LT4).
- To allow for technical setup, Session 6B (Technology and mediation II), will take place in Lecture Theatre 3 (LT3).
- Plenary sessions will take place in LT1.
- Concerts will take place in the Clothworkers Centenary Concert Hall (CCCH).
- Tea and coffee breaks and lunches will be provided in the CCCH Foyer.
- Spoken papers last 30 minutes in total (20 minutes followed by 10 minutes of questions).
- Lecture-recitals last 45 minutes in total (35 minutes followed by 10 minutes of questions).
- During the conference there will be a screening of John Cage's *One[11] and 103* (1992) in the School of Fine Art. See further details on page 24.

Day 1: Friday 30 June

11:00	**Registration** (a welcome desk will be open in the School of Music reception area from 11:00, with tea and coffee available in the in CCCH Foyer)	
13:45–14:00	**Welcome (CCCH Foyer)**	
14:00–15:30	**Session 1A (LT1)** **Critical approaches** [Chair: Sean Williams]	**Session 1B (LT4)** **Games and play** [Chair: Chris Melen]
	Élan vital and how to fake it Ryan Dohoney (Northwestern University)	What's the point? Balancing purpose and play in game compositions James Saunders (Bath Spa University)
	Do performers have to listen? What Cage learnt from Duchamp Anthony Gritten (Royal Academy of Music)	Musical indeterminacy in interactive media Julian Peterson (Gearbox Software)
	Listening indeterminately, 1967-2017 Patrick Valiquet (Institute of Musical Research)	Game scoring: Gameplay, the performance of aleatoric composition and FEZ (2012) Mack Enns (University of Western Ontario)
15:30–16:30	**'Composing's one thing, performing's another…', says Cage: what, then, of that indeterminate other?** **Invited speaker: Catherine Laws (Pianist / University of York)** [Chair: Martin Iddon]	
16:30–17:00	*Tea/coffee break*	
17:00–18:00	**Concert of submitted works (CCCH)**	
21:00–08:00 (Sat)	Organ performance of John Cage's *Organ[2]: ASLSP (As Slow as Possible)* (1987) Diane Luchese (Towson University) **Please note venue: St. Anne's Cathedral, Leeds City Centre**	

Day 2: Saturday 1 July

21:00 (Fri) – 08:00	Organ performance of John Cage's *Organ²: ASLSP (As Slow As Possible)* (1987) Diane Luchese (Towson University) **Please note venue: St. Anne's Cathedral, Leeds City Centre**	
09:00– 10:30	**Session 2A (LT1)** **Politics and democracy** [Chair: Anthony Gritten]	**Session 2B (LT4)** **Praxis** [Chair: Scott Mc Laughlin]
	How democratic is indeterminate music? Robert Adlington (University of Huddersfield)	Notating a community: Christian Wolff's coordination neumes Jessica Stearns (University of North Texas)
	The brain at work: Indeterminacy, cognitive labor, and the posthuman brain in Alvin Lucier's *Music for Solo Performer* G. Douglas Barrett (Independent Scholar)	Iterative processes: Composing and performing as journey forms Lauren Redhead (Canterbury Christ Church University)
	Stockhausen as CEO: The executive model of interpretive labor Kirsten L. Speyer Carithers (Northwestern University)	(Non-)indeterminacy in music and dance collaborations Tomke Kossen-Veenhuis (University of Edinburgh)
10:30– 11:00	*Tea/coffee break*	
11:00– 12:00	**John Cage's *Lecture on Commitment*** **Laura Kuhn (John Cage Trust)** [Chair: Emily Payne]	
12:00– 13:00	*Lunch* **Performance** Scott Mc Laughlin (University of Leeds) *Cartographies of Sheet Metal* (2017) for multiple bowed-cymbal players	
13:00– 15:00	**Session 3A (LT1)** **David Tudor and the *Solo for Piano*** [Chair: Martin Iddon]	**Session 3B (LT4)** **Technology and mediation I** [Chair: James Mooney]
	The Cage Concert Project *Solo for Piano* web app Chris Melen (University of Huddersfield)	'Sounds and gestures cannot be notated in a conventional way': Indeterminacy and Caroline Shaw's *Partita for 8 Voices* Sara Haefeli (Ithaca College)
	Imaginary exactitude. Indeterminacy and the critical edition John Holzaepfel (Independent Scholar)	Recording the indeterminate performer-composer Úna Monaghan (University of Cambridge)
	David Tudor's first realization of *Solo for Piano* by John Cage. A work in progress [Lecture recital] Nicasio Gradaille (Conservatorio Superior de Música de Vigo, Spain)	Ways of not knowing: The cybernetic influence in post-1960s experimentalism Christopher Haworth (University of Birmingham)
		Performing indeterminacy: John Cage's 1954 realisation of Morton Feldman's *Intersection for Magnetic Tape* Tom Hall (Anglia Ruskin University)

15:00–15:30	*Tea/coffee break* **Installation** Sophie Stone (Canterbury Christ Church University) *"As Sure as Time…"* (2016)
15:30–16:30	**The afterlives of indeterminacy** **Invited speaker: Benjamin Piekut (Cornell University)** [Chair: Emily Payne]

16:30–18:00	**Session 4A (LT1)** **(Re)examining indeterminacy** [Chair: Ryan Dohoney]	**Session 4B (LT4)** **Socialities** [Chair: Robert Adlington]
	What has indeterminacy to do with experimentalism? Lawrence Dunn (University of Huddersfield)	In re: Experimental politics William Brooks (University of York / Orpheus Institute)
	Freedom and flux in Brian Ferneyhough's 1970s creative practice Roddy Hawkins (University of Manchester)	Notation cultures: Toward an ethnomusicology of music notation Floris Schuiling (Utrecht University)
	On material indeterminacy Scott McLaughlin (University of Leeds)	Dieter Schnebel's experimental music and its pedagogical approach Nadine Scharfetter (University of Music and Performing Arts Graz)

18:00–18:30	**Roundtable discussion: Performing Cage's art works** **Sam Belinfante (University of Leeds)** **Laura Kuhn (John Cage Trust)** **Jeremy Millar (Royal College of Art)** [Chair: Martin Iddon]
18:30–19:30	*Conference dinner* (University House)
20:00	**Apartment House concert (CCCH)**

Day 3: Sunday 2 July

09:00–10:30	**Session 5A (LT1)** **Openness** [Chair: Lauren Redhead]	**Session 5B (LT4)** **Extending indeterminacy** [Chair: Roddy Hawkins]
	Icare apprenti: Henri Pousseur, Serialism and the open work [Lecture recital] André Brégégère and Mirna Lekić (Queensborough Community College, City University of New York)	Performing *Womens Work*: Investigating the 'feminist performance score' Irene Revell (CRiSAP, London College of Communication)
		The role of indeterminacy in improvised formal structure: Cecil Taylor's 'Tree of Life' Michelle Yom
	Indeterminacy reclaimed: re-evaluating and responding to aspects of Cardew's experimental music of the 1960s [Lecture recital] Michael Parsons	Brethren unite! Shouts, whistles, and improvisations as indeterminate elements in Frederic Rzewski's Piano Variations on '¡El pueblo unido, jamás será vencido!' Omri Shimron (California State University, East Bay (Hayward))
10:30–11:00	*Tea/coffee break*	
11:00–11:45	**Performance Studies Network sponsored session** **Q&A with Apartment House musicians and Amanda Bayley (Bath Spa University)**	
11:45–13:00	**Session 6A (LT1)** **Panel presentation** [Chair: Bryn Harrison]	**Session 6B (LT3)** **Technology and mediation II** [Chair: James Saunders]
	Performing Hugh Davies's live electronic music Owen Green (University of Edinburgh), James Mooney (University of Leeds) and Sean Williams (Open University)	Performing Cat Hope's *Tone Being* for tam-tam and sub-woofer using an electronic graphic score [Lecture recital] Louise Devenish (University of Western Australia)
		Improvisation and indeterminacy in Pauline Oliveros' expanded instrument system Ted Gordon (University of Chicago)
13:00–14:00	*Lunch*	
14:00–15:00	**Performing concerts** **Invited speaker: Christian Wolff (Composer / Dartmouth College)** [Chair: Philip Thomas]	

END OF CONFERENCE

Invited speakers: abstracts

Catherine Laws (Pianist / University of York)
'Composing's one thing, performing's another...', says Cage: what, then, of that indeterminate other?

What do we mean by 'performing indeterminacy'? Performance is, on one level, always an act of substantial determinacy: we ascribe the making of a sound or action to purpose of some kind, on some level. An event is brought into existence and witnessed as such. But performance is always, also, indeterminate: contingent, contextual and unpredictable to different degrees, characterised by the significant uncertainties in the complex interactions of performers, instruments (of any kind), spaces and audiences.

Performing music defined as indeterminate can, but does not always, involve indeterminacy in the event of performance. Some players, with some pieces, use the rehearsal process to explore different possibilities before determining the content to be delivered in performance. Here, the extent of that indeterminacy in performance is arguably no different to that inherent in performing any score, no matter how fully determined the content. The difference lies in the process towards performance. In contrast, there are of course many performances of indeterminate music in which players make more or less in-the-moment decisions about exact content, though from a circumscribed range of possibilities. And equally there are scores that themselves determine such indeterminacy in performance, with instructions that *require* in-performance decision making.

This summary confirms the richness and complexity of the field, but while indeterminacy has been the subject of ongoing debate and theorisation for some 50 years now, I would argue that the discourse remains predominantly focused upon composers: on the extent and nature of their intentions and how they are expressed in scores. In this respect, even apparently performance-orientated discussion rarely moves beyond matters of realisation: what a player can and cannot do in response to a particular score. Despite all the claims for the ways in which indeterminate music might afford players a particular creative agency, notwithstanding the insightful commentaries of certain performers, and regardless of the work of those, like George Lewis and Benjamin Piekut, who have considered indeterminacy and experimentalism in relation to a wider network of musical practices, much of the discourse remains couched in the same old terms. Drawing on a range of examples, this presentation will explore the locus of indeterminacy, focusing on its manifestation in the experience of performing; its immanence in performance. I will attempt to consider some of the different ways in which indeterminacy is enacted in performance today, and the circumstances in which playing music in front of an audience might be performative *of* indeterminacy.

Benjamin Piekut (Cornell University)
The afterlives of indeterminacy

To perform indeterminacy is to charge the present moment with multiple possibilities, but it is also to multiply problems for the future—namely, how to re-perform indeterminacy and how to re-create the ruptures of the past in a new present. This talk considers some of these problems with reference to John Cage's evolving performance practice in the 1960s, particularly with his collaborator, David Tudor, and the other musicians of the Merce Cunningham Dance Company.

Christian Wolff (Composer / Dartmouth College)
Performing concerts

Christian Wolff discusses the historical and performance implications of Cage's *Concert for Piano and Orchestra* and his own *Resistance*, both performed on Saturday evening.

Spoken papers and lecture recitals: abstracts

Day 1: Friday 30 June

Session 1A: Critical approaches

Élan vital and how to fake it
Ryan Dohoney (Northwestern University)

The relationship between US experimentalism and vitalist philosophy has up until now been figured as the reception of Henri Bergson in the writings of John Cage. In particular, art historian Branden w. Joseph has used the traces of Cage's Bergsonism to argue for the composer's anti-representational aesthetics in such a way that Cage (and by extension Rauschenberg and Cunningham) are sharply distinguished from and critically positioned against abstract expressionism. However, recent scholarship has shown the wide-ranging nature of mid-century vitalism and Bergsonism and its importance to abstract expressionism. Valerie Hellstein, Ellen G. Landau, and others argue that a shared metaphysics linked Cage and abstract expressionism to a far greater degree than Joseph—and even Cage—allowed.

In this paper, I examine the performance of indeterminacy through vitalist discourse of the New York School, focusing on Morton Feldman's music and collaborations from 1950–60. On a general level, we find him borrowing Bergsonian vocabulary for his piece titles (*Extensions* and *Durations*) and describing his open-form piano piece *Intermission 6* as "an outline of becoming"—a fundamental concept in Bergson's thought. Beyond this, I reconstruct the "ambient vitalism" of Feldman's avant-garde community and document its traces in his collaborations with sculptor Seymour Liption and dancer Merle Marsicano. In the former, Feldman's portentous tones sound out the embryonic energies of Lipton's biomorphic sculptures in a pseudo-documentary film. In the latter, Feldman's open form and unpublished piano piece *Figure of Memory* accompanied Marsicano's "experience of pure movement" realized through her idiosyncratic and nearly-forgotten vitalist choreography. Taking Feldman's connection of "becoming" with the only two examples of open-form scores in his oeuvre as well as his enduring commitment to abstract expressionism, I close with a critique of scholars like Joseph that insist that anartists' commitment to vitalism is somehow evidence of good politics.

Do performers have to listen? What Cage learnt from Duchamp
Anthony Gritten (Royal Academy of Music)

Cage and Duchamp first met in the 1940s. They collaborated twice: on Duchamp's segment of Richter's film *Dreams that Money Can Buy* (1947); and on *Reunion* (1968), a musical performance generated by a chess game. In the intervening decades they became close both artistically and personally. Cage even imputed symbolism to the fact that Duchamp had first employed musical chance procedures in the year of Cage's birth, and references to Duchamp in his writings became increasingly common. While there were only a couple of references in *Silence* (1961), *A Year from Monday* (1967) and *M* (1972) were replete with allusions, anecdotes, invocations, and homages to Duchamp. There were also whole texts: '26 Statements re Duchamp' and '36 Mesostics Re and Not Re Marcel Duchamp'. Cage continued working through Duchamp in e.g. *X* (1983), but this paper focusses on the period up to just beyond Duchamp's death.

There has been little detailed analysis of Duchamp's influence on Cage, beyond broad comparisons between their conceptions of silence and humour, their deployment of objects, and the role of indeterminacy in their decision making. There has been even less analysis of how Cage's experimental performance practice developed on the back of Duchamp's example. So this paper seeks out the Duchamp in Cage – "One way to write music: study Duchamp." – in order to reconstruct a performance aesthetic reflecting Duchamp's role both in the wider 1960s avant-garde and as a personal model for the types of performance events sought by Cage. Acknowledging the Duchampian idea that "it is nowadays considered perfectly legitimate for anyone to be an artist without being a

painter, or a writer, a musician, a sculptor, a film maker, and so on. Would modernity have invented *art in general*?", this paper asks what it means for performing Cage to speak of *performance in general*.

Listening indeterminately, 1967-2017
Patrick Valiquet (Institute of Musical Research)

The idea that indeterminacy might play a role in musical form originated in measurements of acoustic and phonetic intelligibility for electrical signals. Claude Shannon's mathematical theory of communication asserted that the best way to measure the information content of a message was to specify which parts of it the receiver *could not* predict from previous experience. A generation of theorists following Shannon sought to derive quanta of unpredictability that could explain the appeal of certain musical works over others. They attempted to prove their hypotheses both analytically and experimentally, that is by composing pieces with specific controls on predictability.

In compositional practice indeterminacy developed strong associations with a Cagean aesthetics of disciplined tolerance and chance. But in the sciences the concept remains an important part of the way we understand listeners' adaptation to basic musical novelties. Today this active differentiation of the unexpected from the expected is understood to operate at much lower levels of aesthetic experience than the musical work. Taking a perspective informed by the work of Michel Serres and Bernhard Siegert, I argue that we should think of the measurement and processing of indeterminacy as playing a constitutive role in the biology and psychology human musical audition. Participatory and performative accounts of human musicality such as those of Christopher Small and Peter Szendy thus have a deep history in scientific knowledge techniques, separate from the interests of cultural musicology.

By way of illustration I offer two historical snapshots. In the first I discuss how francophone structuralist theorists around 1967 used concepts of indeterminacy to explain the productive qualities of perceptual competence and material 'grain'. In the second I consider the ways that the contemporary neuroscientific theory of predictive coding is being used to establish pre-conscious sites of indeterminacy at the levels of action-perception, memory, and affect.

Session 1B: Games and play

What's the point? Balancing purpose and play in game compositions
James Saunders (Bath Spa University)

Rule-based compositions may specify actions or activities that have no explicit purpose. A process is initiated, perhaps with an end condition, and the piece plays itself out. Players follow instructions, and then stop: but what are they aiming to do? This paper explores the balance between purpose, play and task subservience in rule-based music. It considers ways in which games might suggest approaches for harnessing specific motivations of players in musical contexts, facilitating 'the process of engaging with the world and oneself through play' (Sicart 2014: 84). Tasks in persuasive games (Bogost 2010) are designed to embody real-world challenges, while recent work by Flanagan and Nissenbaum (2014) proposes an approach to game design that communicates embedded values. Such approaches translate to other disciplines, including rule-based music, presenting models for linking tasks to purpose and play, and with it relationships outside the 'temporary world within the ordinary world' (Huizinga 1955: 10). Game designers may create situations that prioritise the 'aesthetic or sentimental value of game choices' (Juul 2007) over win states, questioning the nature of play within games that might align more to music and the need for players to determine their own purpose within a field of available possibilities.

Musical indeterminacy in interactive media
Julian Peterson (Gearbox Software)

Traditional fixed media such as audio recordings and film are an awkward fit for indeterminate music. By contrast, interactive media—including video games, interactive graphic novels, and similar forms— provide rich opportunities for music of indeterminate structure. To date, however, these formats have primarily relied on linear approaches to scoring and sound design, in part due to technological limitations that have only recently been lifted.

The size, scope, and complexity of virtual worlds continue to increase; likewise, the number and variety of audience/participant interactions within those worlds become ever-more nuanced. The current practice of playing pre-recorded sound effects from a fixed bank of sounds will be insufficient to cover the variety of possible interactions with virtual objects. A similar problem exists for music within video games. In the majority of games, soundtracks are either entirely fixed or they reflect variation in game state through simple devices like switching music tracks or layering materials together. Rarely do game soundtracks achieve complexity greater than a binary switch between game states (ex., combat/not-combat). For video game musics to become as flexible and dynamic as the worlds in which they are set, composers, musicians, and game designers need to develop tools and practices that make adaptive soundtracks possible.

In this paper I explore generative music, algorithmic composition, interactive sound objects, musical space, and composed instruments as concepts which I believe can enable indeterminate music to be a vital component of virtual experiences. In general, I make the case that interactive virtual worlds provide rich opportunity for musicians with experience in indeterminism to reach a broader audience and possibly establish indeterminate techniques in music as the expected practice in this new media landscape.

Game scoring: Gameplay, the performance of aleatoric composition and FEZ (2012)
Mack Enns (University of Western Ontario)

"Game scoring," or the act of composing music for and through gaming, is distinct from other types of scoring, because it is always an at least partially aleatoric compositional activity. Aleatoric composition includes all compositional activity in which one or more musical elements are left to chance, as well as compositions in which some degree of improvisational freedom is afforded performers. Game scoring synthesizes both of these "types" of aleatoric composition. In fact, game scoring is a peculiar type of composition because the "performer" of a game score is not a musical performer but a "ludal" one, that is, a "gamer" ostensibly involved in specifically non-musical activity (Collins, 2013). Sound, visuals and haptics inform the gamer's gameplay choices, so game scores are subject to improvised chance operations which only the combination of these phenomena enable (Knox, 2014).

The interactive nature of game scoring necessitates a dialogue between the composer and the gamer, and this is facilitated through software programming and gameplay mechanics. In fact, I would go so far as to say that the game scorer writes rules for music more than simply composing in any traditional sense (ie., rule #1: if the player moves left, trigger a descending motif; if they move right, trigger an ascending motif). To exemplify this point, and to elucidate game scoring's aleatoric nature, this paper will use video game music composed by Rich Vreeland for the 2012 Xbox Live Arcade "puzzle-platformer" game *FEZ*, as an instructive example.

Day 2: Saturday 1 July

Session 2A: Politics and democracy

How democratic is indeterminate music?
Robert Adlington (University of Huddersfield)

The standing of indeterminate music in relation to ideas of democracy is sharply contested. On the one hand, indeterminacy is lauded for granting a more active role to performer and listener, in response to the perceived excess of composerly control in serial music. On the other hand, indeterminate music is criticised for denying performers and listeners the possibility of mobilising their own musical histories and identities, unless they already accord closely with composerly precepts, meaning that some interpretations of indeterminate music are ruled illegitimate. This paper proposes to move beyond this kind of interpretive stalemate by looking more closely at the concept of 'indeterminacy' within democracy theory. In the adumbration of what is often termed 'radical democracy', especially, indeterminacy has a privileged position. Claude Lefort writes that 'democracy thus proves to be the historical society *par excellence*, a society which, in its very form, welcomes and preserves indeterminacy', a claim that hangs on what he regards as democracy's repudiation of 'markers of certainty' intended to shore up the organisation of society against future change. In contrast to advocates of deliberative democracy, radical democrats argue that taking difference seriously means that one can never posit a single rational process intended to achieve a final consensus between all. Instead of the model of 'People-as-One', a model Lefort relates to the physical body of the prince under feudalism, radical democrats elaborate a fundamentally agonistic model whose indeterminacy is variously figured as an 'empty place', 'disincorporation', and 'the dissolution of markers of certainty'. By exploring such characterisations, I will then return to and assess the contrasting claims made by musical indeterminacy's advocates and critics.

The brain at work: Indeterminacy, cognitive labor, and the posthuman brain in Alvin Lucier's
Music for Solo Performer
G. Douglas Barrett (Independent Scholar)

This paper uses Alvin Lucier's experimental music of the 1960s and cybernetics theory beginning in the 1940s to respond to recent debates around cognitive labor, posthumanism, and indeterminacy. Through a close reading of *Music for Solo Performer* the study speculates on the artistic and economic consequences of neuroscience research that seeks to create a fully functional model of the human brain. This process, known as "brain emulation," integrates artificial intelligence and computational approaches to neuroscience. Importantly, *Music for Solo Performer* was a collaboration with Edmond M. Dewan, a physicist and friend of cybernetics pioneer Norbert Wiener, who had also linked brainwaves to artificial intelligence. Inaugurating what one could call without exaggeration a "neuromusical turn" beginning in the experimental music of the 1960s, Lucier anticipates the rise of the kind of neuroscience research central to brain emulation and recent theories of the "posthuman brain."

Lucier's *Music for Solo Performer*, indebted to Cage's notions of indeterminacy and experimentalism, notably emerged alongside the expansion of the military-industrial complex and the large-scale labor transformations of late capitalism. When read as staging the performer's "brain at work," along these lines, *Music for Solo Performer* appears as a response to post-Fordist models of "cognitive labor" wherein mental as opposed to manual work had become prioritized. Lucier's composition is considered further in relation to the economic implications of brain emulation, while indeterminacy figures as a potential aesthetico-political response to the seeming fatalism of technological advance. Scientists and economists predict that functional brain emulations, like other models of artificial intelligence, may promise a virtually infinite source of labor, thus resulting in mass unemployment for physical and cognitive workers alike. Finally, indeterminacy appears not only as a formal feature of Lucier's work, but here is imagined as a strategy for rerouting the apparent determinism of technoscientific capitalism.

Stockhausen as CEO: The executive model of interpretive labor
Kirsten L. Speyer Carithers (Northwestern University)

This project brings experimental music performance into conversation with labor theory. My current research introduces a theoretical framework for the creative work of realizing experimental compositions and notational systems, which I call *interpretive labor*. After briefly introducing three models of interpretive labor (the Scientist, the Hacker, and the Gamer), I discuss my Executive model in detail, bringing together ideas about authorship, representation, and exploitation. Performances of Stockhausen's *Plus Minus* provide an ideal case study. Unlike many other indeterminate works, it cannot be performed from the published score, creating a real-time realization. It is, as Christopher Fox describes it, "deliberately designed to be unperformable" (*Musical Times*, 2000). Its indeterminacy, while allowing for some degree of individual style, is ultimately constrained by the labor-intensive rules governing its production, a fact that has led some performers to react subversively.

In this paper, I consider historical performances of *Plus Minus*, including the 1964 realization by Charlotte Moorman and Nam June Paik at the second annual New York Avant-garde Festival, which is notable for its inclusion of Paik's "robot opera." I also discuss a 1967 event put on by the Center of the Creative and Performing Arts (CCPA) in Buffalo, NY. The group co-composing the piece for that performance included Stockhausen's former assistant, Cornelius Cardew, whose polemical writings illuminate the piece's burdens. CCPA percussionist Jan Williams's annotated scores grant insight into the process of realization, and my conversations with Williams and others illuminate the joys and challenges of this type of repertoire. Drawing on these performances' sketches, archival recordings, and reception history, I argue that Stockhausen is effectively outsourcing his compositional responsibilities in this work, and make a case for radically reframing indeterminate music performance-practice as a mode of production.

Session 2B: Praxis

Notating a community: Christian Wolff's coordination neumes
Jessica Stearns (University of North Texas)

In his indeterminate scores, Christian Wolff promotes spontaneous interactions between musicians. This aesthetic of improvisation and coordination began with his works of the late 1950s and led to his creation of new notation that he incorporated into many of his pieces in the next decade. One of the most innovative aspects of Wolff's notation is his coordination neumes, which instruct performers when to begin and end a sound in relation to what is happening around them. Wolff, along with other New York School composers, found inspiration and support for such innovations in a cultural and intellectual environment fostered by the myriad of artists, writers, dancers, and jazz musicians who flocked to the city after WWII. This group of artists formed lasting friendships, serving as collaborators, supporters, and audiences for each other's work. In a personal interview with the author, Wolff stated that the interactions and collaborations his coordination neumes generate among performers parallel the sense of community among the various creative individuals active in the New York scene during this period.

Although scholarship has addressed the interactive and social nature of Wolff's notation, how such processes correspond to the exchanges between New York's artists has not been explored. This paper examines Wolff's statement through a performance analysis of *For 1, 2, or 3 People*, one of his works that includes coordination neumes. Like the artistic community fostered in New York's cultural environment at mid-century, Wolff's coordination neumes produce a collaborative atmosphere in performance and create a community on stage.

Iterative processes: Composing and performing as journey forms
Lauren Redhead (Canterbury Christ Church University)

This paper posits that composing and performing practices are not distinct from each other. By conceiving of the activities of composing, performing and listening as 'journey forms' (Bourriaud, 2010), an interpretative link between these practices as semiotic processes can be observed. These processes can be clearly recognised in radical works of graphic or text notation that make no or little reference to the western tradition of music notation, and whose composers offer no or few indications of the methods by which they should be interpreted or their intended performance outcomes. In such works of experimental music, performer choice and creativity are highlighted, but nevertheless the pieces also have identifiable (and named) composers, and performances of them should be considered separately from freely improvised performances which belong solely to their performers. Zubin Kanga's (2015) notion of 'work specific' performance practice is therefore offered as a paradigm through which the journey forms of composing and performing collaborate in the performance of these works. Understanding these practices as iterations of the same process means that the activities of composing and performing can be considered as equal within collaborative practices without the need to posit the performance of experimental scores as a compositional practice in and of itself. The journey form re-casts both the composer and performer as 'semionauts' (Bourriaud, 2010) who navigate the same artistic landscape. Examples of such iterative processes will be offered from the author's own work (*ijereja*, 2015) and collaborative work with composer Caroline Lucas (*[Unnamed Maps Series]*, 2009-2012), visual artist R. Armstrong (*This* **There** *Now*, 2014) and poet Alison Gibb (*Sightings*, 2016), allowing the author to approach the premise from compositional and performative perspectives.

(Non-)indeterminacy in music and dance collaborations
Tomke Kossen-Veenhuis (University of Edinburgh)

To discuss contemporary dance performances in terms of indeterminacy might seem counterintuitive. These are usually repeated staged events in which everything needs to fit perfectly: the choreography and the music, the lighting, the staging, the costumes - all artists involved have to work as a team. Even Cunningham and Cage's collaborative works, for example, appear to the audience as planned and determined. However, if we look at the rehearsal process of a new contemporary dance production, problems and barriers start to emerge (Cope 1976). It becomes obvious that the process of performance production is indeed undetermined, but the nature of indeterminancy varies between the different disciplines. Participants in a collaboration come together from a variety of experiences of training and practice (Ford 2013). Orchestral musicians join the production to play from a (usually) finished musical score, whereas the dancers continue developing the choreography up until the day of the premiere. Here, the importance of notation and its different meanings in music and dance become exposed. In the context of a cross-disciplinary production the disciplines' borders may well be stretched. Musicians are expected to adjust their playing to the dance regardless of the notated score. An 'involuntary indeterminacy' is imposed on their usual performance practices (Cottrell 2004). Meanwhile work with music in the dance studio can be clear and understood but, going on stage, the dancer is faced with the new sound of a live orchestra and has to adapt their choreography to the live musical tempo and sound in every performance (Teck 1994). This paper will look at the different aspects of a music and dance collaboration and its challenges regarding the different disciplines' performance practices and use of notational rules. The resulting collaborative challenges will be described with reference to two ethnographic case studies. I will thus address the question of indeterminacy and its influence on working environments in a setting where it is possibly least expected.

John Cage's *Lecture on Commitment*
Laura Kuhn (John Cage Trust)

What was it actually that made me choose music rather than painting? Just because they said nicer things about my music than they did about my paintings? But I don't have absolute pitch. I can't keep a tune. In fact, I have no talent for music. The last time I saw her, Aunt Phoebe said, "You're in the wrong profession."

I will perform a realization of John Cage's *Lecture on Commitment*, conceived for and delivered by him at Wesleyan University's Beta Symposium on February 23, 1961. The text for this lesser-known work* is reproduced in Cage's *A Year from Monday* (1967), although the unpublished version doesn't do justice to its indeterminate essence. The performance materials consist of 56 index cards, 28 containing texts, 28 containing numbers (equating to seconds). The performer shuffles both decks (maintaining a modicum of order with one card in each), then using a stopwatch, draws one card from each deck, reading the text card drawn according to the time-length indicated on the numbers card drawn.

I will perform from Cage's own materials — reproductions of the original cards held in the John Cage Archives at Wesleyan University. Synchronous with my realization, I will run a slideshow of original materials — images of Cage's cards, of course, which reveal traces of his editorial processes in the writing of his texts, but also some of the original manuscript pages contained in a single stenographer's notebook devoted to the work, given by Cage as a gift and long held in the collection of Jasper Johns. Lastly, there will be a brief post-performance Q & A, during which I will play a bit of the archival audio of Cage's own performance of the work, held in the archives of the John Cage Trust.

**Lecture on Commitment* is not unlike Cage's *Indeterminacy: New Aspect of Form in Instrumental and Electronic Music*. Both utilize largely anecdotal texts written by Cage that are to be performed in undetermined order within strict time-lengths. In *Indeterminacy*, the time for each "story," regardless of its length, is always one minute; in *Lecture on Commitment*, the time for each text, regardless of *its* length, varies according to the corresponding numbers card drawn.

Session 3A: David Tudor and the *Solo for Piano*

The Cage Concert Project *Solo for Piano* web app
Chris Melen
(University of Huddersfield)

In this session Chris will demo the current version of the Cage Concert Project *Solo for Piano* web application. Chris will provide background on the development of the app, and also talk about the numerous challenges that building the app has presented, and how these have been affected by analytic and interpretative questions, and frequently raised such questions. No technical or programming knowledge is expected of attendees of this talk.

Imaginary exactitude. Indeterminacy and the critical edition
John Holzaepfel (Independent Scholar)

If David Tudor's realizations of indeterminate scores have significance beyond documenting the working habits of an extraordinarily meticulous and observant mind, it ought to be in the light they cast on their compositional sources and the insights they offer to performers who have taken up the repertoire Tudor pioneered. Indeed, this was Tudor's own vision. Long secretive about his methods, in his later years Tudor hoped to make annotated versions of his realizations available both to performers and scholars, part of a larger project that would "provide a record, as yet non-existent, of the than significant changes in mu-sic which took place" between 1950 and 1970. Yet the assumptions embedded in Tudor's claim are anything but self-evident.

This paper recounts some of the problems encountered by the author in preparing an edition of Tudor's most ambitious realization, the *Solo for Piano* by John Cage, problems inherent both in Tudor's text and in the idea of such an edition in the first place. In tracing the evolution of the realization in its several forms over the course of half a decade or more and examining the contrast between the rigorous precision of Tudor's written score and the latitude he brought to performing it, the paper concludes with a consideration of the overriding questions: what do David Tudor's realizations have to say, and how do they say it?

David Tudor's first realization of *Solo for Piano* by John Cage. A work in progress
Nicasio Gradaille (Conservatorio Superior de Música de Vigo, Spain)

Solo for Piano is the piano part of John Cage's *Concert for Piano and Orchestra* (1957-1958). It was composed for the pianist David Tudor, a very close friend of Cage, whose inventiveness as a performer the composer admired. It was Tudor who played the premiere on May 15, 1958.

Solo for Piano is an indeterminate composition and is Cage's major work in graphic notation. The graphic elements of this score "are intricate, complex, playful, highly indeterminate, and idiosyncratic" (Retallack, 1996: 297). As an indeterminate score, performers will have to carefully prepare a version over a long period of time. Tudor made two different realizations of this piece. During my doctoral research, partially done on the "Tudor Papers" at the Getty Research Institute in Los Angeles, I attempted to understand and to reproduce the whole first realization process of the performer. In my research I could establish the relationship amongst the score by Cage, the instructions given in that score, and all the sheets of music written by Tudor following those instructions. He proceeded in such a way that he could play a new version in every new performance. According to Cage "a performance of a composition that is indeterminate of its performance is necessarily unique. It cannot be repeated" (Cage, 1961: 39).

In this lecture/recital I will present these elements that were central to my PhD dissertation (University of Vigo, Spain): Tudor's approach to Solo for Piano, how Tudor's First Realization could be considered as a work in progress, and as an example of it, I will play a new version of Solo for Piano using the

material of Tudor's realization.

Session 3B: Technology and mediation I

'Sounds and gestures cannot be notated in a conventional way': Indeterminacy and Caroline Shaw's *Partita for 8 Voices*
Sara Haefeli (Ithaca College)

The unpublished score to Caroline Shaw's Pulitzer prize-winning *Partita for 8 Voices* is prefaced with this remarkable statement: "The 2012 recording by Roomful of Teeth can be considered an essential part of the score. Many sounds and gestures cannot be notated in a conventional way, and the composer encourages drawing on a variety of sources available with today's technology to realize this piece with other ensembles in the future. However, no single document should ever be treated as ultimately prescriptive."

Questions arise from such a statement: In what way can a *recording* be considered part of a *score?* What role can technology play for future ensembles encountering this piece? To what extent does this work point out the limits of *all* musical notations as less-than-prescriptive documents? To make matters even more complicated, Shaw's piece remains unpublished, inspiring questions about the nature of the musical work as a reproducible object.

These questions shape my analysis of Shaw's piece. The accessible surface of this work belies its complexity and its relationship to the experimental music tradition. The accessible surface complicates how we perceive elements of indeterminacy in its performance. Like her experimental forefathers, Shaw confronts a number of modernist binary oppositions with this piece: she blurs the boundary between composer and performer in a way that is resonant with the avant-garde performance art tradition as well as the singer-songwriter tradition of the pop world; her age and gender defy the normative status of the "genius" classical composer; and the insistence that the score is incomplete without the recording challenges the work construct.

Recording the indeterminate performer-composer
Úna Monaghan (University of Cambridge)

I am an Irish traditional harper who performs with computer, manipulating sound via motion sensor and pitch detection. Irish traditional music, like many folk musics, has always embraced indeterminacy. Although a basic melody defines a particular tune, what is heard is indeterminate with respect to speed, style, instrumentation, personal embellishment, and variation. I have expanded on this in my practice, as a performer-composer who combines Irish traditional music with new technology and experimentalism. My pieces are all indeterminate in some respect, to varying extent in the programming, in the behavior of the computer, in my reaction to the computer, or in what I play on harp within the structure of the piece. I embrace indeterminacy as a central tenet of the work. Being performer, composer and at times, improvisor gives a different perspective than if I were one or the other. In January 2017 I will make an album recording of my pieces. I have chosen an engineer who is keen to experiment in this process, and the act of recording indeterminacy will introduce further points of influence in this ecosystem. I am interested to explore ways of recording that retain some of the potential for difference, as the pieces do when performed live. This paper will follow the recording process, and reflect on indeterminacy as:
- central to my practice as a performer-composer;
- historically present in Irish traditional music;
- affected or driven by my relationship with technology in performance with live electronics
- a challenge, or interest, or expansion? in the recording process.

Ways of not knowing: The cybernetic influence in post-1960s experimentalism
Christopher Haworth (University of Birmingham)

It is well known that, after 1950, composers in Europe, Japan and the Americas became increasingly concerned with notions of openness and non-closure in music. And while the term 'indeterminacy' acquired a primacy in the discourse, with John Cage its elected 'gatekeeper' (Piekut 2011, p.48), it is equally well known that his version of the concept was far from being the only game in town. Umberto Eco's influential *Opera Aperta* (The Open Work, 1962; 1989) cites the new autonomy of the individual performer in late 1950s instrumental music as one of the main influences behind his concept of 'openness' in art - works which 'reject the definitive, concluded message' (1989, p.3) - yet he neglects even to mention Cage, instead citing works by Berio, Pousseur, Stockhausen and Boulez as exemplars. There are certainly differences between concepts like aleatory, chance, indeterminacy, stochastics and openness, differences that frequently become the site of politics in the context of late 20th Century musical modernism. Yet, as I will argue in this paper, there are also points of connection - shared aims and influences that go beyond the technical specificities of their implementation. An important but under-acknowledged cross-current was cybernetics and systems theory. Cybernetic thinking permeated arts and culture at this time (cf Pickering 2010; Kahn 2013; Turner 2006; 2013) - indeed, it was one of the key intellectual touchstones for Eco's *Opera Aperta* - however, it wasn't until 1968, with the influential *Cybernetic Serendipity* show at the ICA, that these interdisciplinary links were publically consecrated. Accompanied by an exhibition catalogue and vinyl record featuring works by Cage, Xenakis, Peter Zinovieff, Herbert Brün and others, *Cybernetic Serendipity* offered an entirely different way of framing modernist experimentation with the unknown in music. The show is often cited for its influence on computer art, but in this paper I want to focus on its wider implications for notions of non-closure and openness in music, the aim being to clarify the relations between musical indeterminacy and cybernetic open systems in post-1960s experimentalism.

Performing indeterminacy: John Cage's 1954 realisation of Morton *Feldman's Intersection for Magnetic Tape*
Tom Hall (Anglia Ruskin University)

John Cage's "Project for Magnetic Tape" of the early 1950s resulted in experimental compositions by the composers of the New York School, including the Cage's *Williams Mix.* Morton Feldman's 1953 contribution, the composition *Intersection for Magnetic Tape* raises important questions around indeterminacy and performativity beyond those in common with Cage's work. In particular, Feldman's work can be seen as an important case study exploring the boundaries of performance and the ways in which technologies have changed our relationship to musical indeterminacy. For in the case of *Intersection for Magnetic Tape*, indeterminacy comes into play both in relation to the non-standard notation of the graphic nature of the score, as well as to the particular role of technology in the materiality of the work's realisation, its restoration and contemporary live performance.

John Cage, along with David Tudor, Earle Brown and others spent many months creating the intricate electromagnetic performance materials of Feldman's brief eight-channel composition. Contemporary descriptions of this process are highly suggestive of the ritualistic and performative: those responsible were both collaboratively performing the required indeterminate actions to create the composition on tape, but also labouring under the structural ambiguity inherent within Feldman's graphic score. Limitations of early tape playback technology also brought about a high degree of indeterminacy in the contemporary 1950s public performances of the piece. This paper is illustrated with archival materials that bear witness to the performative process of realisation and subsequent performances of Feldman's work by of Cage et al. Using the methodologies of forensic audio, I also examine recent attempts at restoration of Cage's realisation of *Intersection for Magnetic Tape* and argue that assessment of Feldman's multichannel tape composition must be informed by consideration of the multilayered strands of indeterminacy inherent in both its creation and its contemporary performance practice.

Session 4A: (Re)examining indeterminacy

What has indeterminacy to do with experimentalism?
Lawrence Dunn (University of Huddersfield)

The relationship between indeterminacy and experimentalism is both symbiotic and paradoxical. Does an indeterminate attitude towards musical material precede and define, or emerge from, experimentalism? The paradox of this relationship has grown only more marked as experimentalism has morphed from being a set of working principles to something more of a back-catalogue or repertoire. Experimentalism's putative 'unforseeability' becomes increasingly difficult to rationalise when so much music is enfolded into an existing performance practice and discography.

The problem of determinacy itself is a significant one. What exactly is indeterminacy lacking in determination? What is music capable of determining? What is underdetermination, or overdetermination? And once something has been apparently determined, what then?

This paper explores the ramifications of these questions, revisiting some usual assumptions about experimental music, what it is inclined or considered to be. The paper examines the interaction and implications of determination, preconception, fiction, serendipity, vocabulary, technique; and also uprightness, catholicity (and protestantism), congregation, humility, submission. How best are we to live with a musical practice eminently concerned with being-in-the-present, with a growing past-tense residue trailing behind it? How important are indeterminacy and experimentalism for one other? And what might experimentalism without indeterminacy look like?

Freedom and flux in Brian Ferneyhough's 1970s creative practice
Roddy Hawkins (University of Manchester)

At the end of the 1970s, Brian Ferneyhough, in a draft programme note for his work *Funérailles* (1969–1980) asserts that his compositional practice of the 1970s was concerned above all with the concept of freedom. Though his tentative characterisation of an "(experimental music in a more authentic sense?)" demonstrates wariness, a subsequent, typically more forthright attack on "the high proportion of repetitive and platitudinous gesturing" in improvisatory ensembles clearly reveals the extent to which his creative practice in the 1970s was forged in direct opposition to the 'problem', as he saw it, of composer-performer relations in the practices of musical avant-gardes in the 1960s.

It is not news to observe that the evolution of Brian Ferneyhough's practice of parametric complexity developed in order to propose the possibility of expressive freedom achieved through multiple constraints. Following Ferneyhough's lead, scholars have theorised complexity at the borders between process and system, freedom and control, cutting across composer, material, performer, notation and expressive import; thus, the complexity of Ferneyhough's music is widely accepted to exist in the 'interstices' that mediate relationships underpinning the realisation of his music. This paper offers a critique of the borders and flux so prominent in aesthetic discourses of the avant-garde, and to Ferneyhough in particular. By (re)turning to the sketches of the 1970s, and in particular the late seventies when he begins teaching at Darmstadt, the paper assesses how Ferneyhough's idiosyncratic response to indeterminacy and performer-freedom may be read as part of a broader 'state of flux', namely the history and historiography of avant-garde musics in the 1970s.

On material indeterminacy
Scott Mc Laughlin (University of Leeds)

Material indeterminacy situates compositional practice in the behaviours of objects and materials when performatively activated. By putting objects into certain critical states, the instrument behaviour is made locally less predictable, but still retains a global character that allows the player to interact with families and types of behaviours. In my own work, preparations or specific playing techniques to put the instrument into metastable regimes (e.g. multiphonics on strings/metal/air mediums) where the player can explore responses of the instrument, and use the indeterminacy to guide the next action. Form is emergent as the player and object negotiate a 'dance' of human and material agencies (Pickering 1995). The text score describes the conditions to be set up, and guides the player's response to contingent situations.

This practice is discussed in relation to a diverse range of ideas around new materialisms and performative ontologies: Jane Bennett, Tim Ingold, Andrew Pickering, Karen Barad. My discussion will I will also touch on the larger research question of indeterminacy as a resistance to flattening, homogenization, and commodification. This is grounded in Pickering's idea of 'decentered practice' (Pickering 1995) and Philip Agre's 'critical technical practice' (Agre 1997).

Session 4B: Socialities

In re: Experimental politics
William Brooks (University of York / Orpheus Institute)

In the past half-decade I have published three inter-related articles on experimental art. All three began as papers given at conferences and seminars. I propose to continue my investigation in this paper by applying some of the same methods and philosophical frameworks to the topic of "politics."

As in the previous articles, I will deal primarily with the music of John Cage. My philosophical framework will be built largely from American pragmatism, especially as articulated by John Dewey. (I have addressed the relationship between Cage and pragmatism elsewhere, and I will only very briefly recapitulate that argument here.) My method, which I will reapply to the domain of politics, is three-pronged: (1) reading anew Cage's political writings and pieces with attention to the historical context for and the applicability of the word "experimental"; (2) creating a taxonomy of sources, their implications, and their progeny; (3) situating these works—and their "performance"—in the continuum between experience and experiment implicit in pragmatist thinking and its associated progressive politics. I shall look at a range of works but will concentrate most of my attention on works and writings from the 1960s and 1970s: the "Diaries," Lecture on the Weather, and the Song Books.

Notation cultures: Toward an ethnomusicology of music notation
Floris Schuiling (Utrecht University)

The performative turn in music scholarship was formulated in opposition to the work-centred tradition of musicology. It has emphasized the generative and creative role of performance as a socio-musical practice, as opposed to the 'idea that performance means bringing out something that is already there in the score, composed into it and just waiting to be released by the performer' (Cook 2013).

Drawing on the anthropology of media, material culture, and technology, this paper aims to provide a counter-narrative to the perceived idealism and ocular-centrism of notation by proposing the concept of 'Notation Cultures': practices in which the use of particular notation systems informs cultural identities and ways of conceptualizing music as a social practice. Laying the groundwork for a recently started comparative ethnographic research project, the theoretical arguments put forward in this paper will be illustrated with recent musicological work on notation and performance as well as

preliminary ethnographic results from various case studies, in which notation is indeterminate to varying degrees.

Approaching notations in terms of the *mediation* of agency in the social and creative processes that characterize performance rather than the *representation* of musical structures, this paper avoids a binary distinction between text and performance, but situates notation in a conception of music as 'paradigmatically multiply-mediated' (Born 2005), existing by virtue of technological and social mediation (Dolan 2012, Moseley 2016). As interfaces for such networks of musical mediation, notations construct musical subjectivities and socialities, condition the sensory perception and motoric skills of musicians, and assemble musical ontologies (Bohlman 1999), thereby affording ways of conceptualizing music itself.

Dieter Schnebel's experimental music and its pedagogical approach
Nadine Scharfetter (University of Music and Performing Arts Graz)

Influenced by performances of John Cage's works in Europe in the 1950s, the German composer Dieter Schnebel started to compose experimental music himself. His interest in experimental music was awoken by the fact that it offered opportunities that deliberately subverted the traditional understanding of composing and performing a musical work. In their experimental works composers disregarded conventional compositional theories, they included new sound materials, and used instruments in new non-traditional ways. Nevertheless, not only other composers have influenced Schnebel's compositions. His education in various fields such as theology, philosophy, musicology, and his teaching profession significantly influenced Schnebel's work as a composer as well. For that reason, an analysis of his compositions does not lead to a satisfying result without considering Schnebel's biography.

In my presentation, I focus on the pedagogical aspect in Dieter Schnebel's experimental music. By analysing some of Schnebel's works with a pedagogical approach – for example 'Maulwerke für Artikulationsorgane und Reproduktionsgeräte' or 'Schulmusik' – I deal with the following questions: How does Schnebel's pedagogical approach manifest itself in these works? For whom did he compose these works: Professional musicians, amateur musicians, or both? Are these musical works even supposed to be performed on stage, or are they intended to serve an educational purpose only? How are these works indeterminate music? For what purpose did Schnebel compose these works? Where does Schnebel's interest to apply a pedagogical approach in his musical works stem from? However, analysing the musical works is not enough to answer all of these questions. As mentioned before, for a better understanding of his musical works, one must consider Schnebel's biography as well.

Roundtable discussion: Performing Cage's art works
Sam Belinfante (University of Leeds)
Laura Kuhn (John Cage Trust)
Jeremy Millar (Royal College of Art)

This roundtable discussion considers how curation, particularly in the visual and plastic arts, might be read as performance, drawing on the experiences of our three speakers, who all contributed to a major retrospective of Cage's artwork, *Every Day is a Good Day*, which toured the UK in 2010–2011. Conceived of and curated by Jeremy Millar, *Every Day is a Good Day* was organised by Hayward Touring in collaboration with the John Cage Trust, and remains the largest exhibition to date of the visual art of Cage. Curator, filmmaker, photographer, and sound artist, Sam Belinfante, devised a series of performances and events for *Every Day is a Good Day*.

Day 3: Sunday 2 July

Session 5A: Openness

Icare apprenti: **Henri Pousseur, Serialism and the open work**
André Brégégère and Mirna Lekić (Queensborough Community College, City University of New York)

This proposal is for a presentation of Henri Pousseur's *Icare apprenti* (1971) by André Brégégère (ca. 25''), followed by a piano solo performance of the piece by Mirna Lekić (ca. 10''). Subtitled "*improvisation pour un nombre indéfini d'interprètes*" ("Improvisation for an undetermined number of performers"), *Icare apprenti* consists of a set of basic musical materials, and of detailed instructions for the realization of these materials in an actual musical performance. After a short review of Pousseur's earlier experimentation with indetermination—e.g., *Scambi* (1957); *Votre Faust* (1961–68)—, examined within the broader context of similar endeavours by the composer's European contemporaries (e.g., Stockhausen's *Klavierstücke XI,* Boulez's *Domaines*), I will present an analysis of *Icare* as an open, yet tightly controlled improvisational playground for its performer(s).

I will first describe the piece's most basic elements—a set of cards providing harmonic/pitch material in the form of interval networks, as well as other performance parameters such as dynamics, articulation, density, etc.—, and the rules governing the articulation of these elements into actualized sequences, and, in turn, the combination of these sequences into a complete performance. I will then briefly discuss the apparent paradox between Pousseur's tightly controlled serial methods, and the playful interpretative freedom displayed in the piece, arguing that the two aspects might not be as irreconcilable as it seems.

The rest of the presentation will take a more practical turn, detailing the preparation of the specific version of the piece performed by Mirna Lekić, and the challenges posed by the preparation of such a performance.

Indeterminacy reclaimed: re-evaluating and responding to aspects of Cardew's experimental music of the 1960s
Michael Parsons

After Cardew's repudiation in the 1970s of his earlier work, his criticisms of Cage and Stockhausen and his politically motivated adoption of a more conservative musical language, many of his colleagues felt that in rejecting his own previous work he also discouraged the further exploration of experimental techniques and methods. His adoption of a political stance involved a kind of 'short-circuiting' of musical possibilities, presenting in effect a 'fait accompli' which prevented others, even those who did not share his political views, from continuing to use these methods.

It was only after Cardew's death in 1981 that I began to re-evaluate some of his earlier music. It seemed to me that there were significant aspects of his work of the 1950s and 60s deserving renewed attention. In the 1990s I was able to work with a new generation of performers who were interested in his pre-political music, and this contributed significantly to my own reassessment.

I wrote pieces responding to aspects of Cardew's music of the 1960s, as well as to that of Cage, Feldman, Wolff and Earle Brown, which I felt had been undervalued and marginalised in the intervening years. I used flexible forms of verbal and diagrammatic notation to re-introduce, within defined compositional limits, degrees of freedom for performers in the choice of pitch, rhythm, articulation, dynamics and co-ordination. I will discuss reasons for my compositional decisions and describe how these works offer opportunities for performers to become actively involved in their realisation.

Session 5B: Extending indeterminacy

Performing *Womens Work*: Investigating the 'feminist performance score'
Irene Revell (CRiSAP, London College of Communication)

Womens Work [sic][1] is a collection of performance scores[2] by 14 women, self-published by Alison Knowles and Annea Lockwood in New York City in 1975. It includes the work of prominent figures such as Simone Forti, Pauline Oliveros and Mieko Shiomi though many contributors remain little known and this multidisciplinary publication has been rarely referenced and never considered in its own right. Yet it offers an invaluable counterpoint to the male avant-garde canon, evidencing a network of diverse artists relating their score-based practices to the feminist art movement of the 1970s that tended to focus on more traditional visual media.

As a curator for the past fifteen years I have presented numerous score-based performance works. My experience of staging Oliveros' *To Valerie Solanas and Marilyn Monroe, In Recognition of their Desperation* (1970) at Tate Modern in 2012[3] specifically lead to my interest in the *feminist performance score,* to my coming across this collection through my exhibition project *Slow Runner* (Badischer Kunsteverein, 2013), and to my emerging understanding that such works come into meaning through the iterative process of their performance.

My paper introduces *Womens Work* and argues that the *feminist performance score* presents a complex and entangled set of relations between the two-dimensional printed score, its previous performances, and those yet to come. Working with Karen Barad's notion of *agential realism* it starts to develop a post-human performative understanding of the score's materiality and meaning in it iterative becoming, with resultant curatorial implications.

[1] Knowles, A and Lockwood, A (eds) (1975) Womens Work Issue 1, New York: self-published.
[2] Within the term 'performance score' I include event, instruction, text, graphic scores and those using other non-conventional notation; all scores in the collection in question are text-based to varying degrees.
[3] A performance presented in the Turbine Hall as part of the series 'Her Noise: Feminisms and the Sonic', Tate Modern, 2012, co-presented by CRiSAP and my organisation, Electra, to mark the donation of Electra's Her Noise Archive to UAL Archives and Special Collections.

The role of indeterminacy in improvised formal structure: Cecil Taylor's 'Tree of Life'
Michelle Yom

In this paper I articulate what is indeterminate in Cecil Taylor's music by analyzing a live recording of an improvised solo concert ("Period 2," *Tree of Life* FMP: 1998). I start by briefly problematizing the terms "improvisation" and "indeterminacy" in consideration with the term *afrological* (Lewis, 1996). Then I analyze Taylor's music through a reductive transcription and three levels of segmentation. This shows a functional role of "clusters" in Taylor's music as indeterminate segments in which neighboring segments gravitate toward, and in which a sort of reset/resolution takes place. I argue that Taylor's music structures through probability within a multiplicity of possibilities with a flexibility offered by indeterminate segments, yet adheres to a cryptic tonality. To conclude I contemplate Taylor's own description of his music alongside the results of my analysis.

Brethren unite! Shouts, whistles, and improvisations as indeterminate elements in Frederic Rzewski's Piano Variations on '¡El pueblo unido, jamás será vencido!'
Omri Shimron (California State University, East Bay (Hayward))

Frederic Rzewski's iconic set of 36 Variations on "The People United Will Never Be Defeated!" (1975), incorporates a variety of indeterminate elements, as do many of his other compositions. In some cases, Rzewski asks the performer to make gestures that are not entirely indeterminate but are unusual in their demands, resulting in strikingly idiosyncratic interpretations. For example, in *Variation 11*, the composer asks the pianist to forcefully slam the keyboard lid, whistle several notes, and make a "vocal cry." Pianos and pianists will vary widely in the manner by which these sounds are produced yet the timing of these events is entirely predetermined. Still, does a vocal "cry" necessarily mean a non-verbal, primordial outburst, or could the performer involve words that support a broader interpretive agenda? On the other end of the indeterminacy spectrum, Rzewski invites the performer to improvise a cadenza of "up to five minutes or so" with no further instructions on structure or choice of thematic material. The improvised cadenza is positioned at a critical juncture in the work's unfolding, after the 36th variation, and just prior to the Goldberg-like return of the main theme. As with any cadenza, the performer must decide whether the improvisation functions in a summative way or might it introduce new material that has not been previously presented by Rzewski? This lecture recital will begin by providing a survey of ways in which pianists realized indeterminate elements in their respective commercial recordings. Following, the presenter will show the extent to which, in his recording of this work, he took liberties with indeterminate elements by superimposing politically-minded gestures that go beyond the confines of the instructions left by the composer.

Performance Studies Network sponsored session
Q&A with Apartment House musicians and Amanda Bayley (Bath Spa University)

Convened in collaboration with the Performance Studies Network and chaired by Amanda Bayley, this session will be an opportunity to discuss the previous evening's concert, as well as to explore topics that have been raised over the three days. Musicians from Apartment House will be invited to reflect on their experiences of performing indeterminate musics, with particular reference to Christian Wolff's *Resistance* and John Cage's *Concert for Piano and Orchestra*, with opportunities for delegates to pose questions from the floor.

Session 6A: Panel presentation

Performing Hugh Davies's live electronic music
Owen Green (University of Edinburgh), James Mooney (University of Leeds) and Sean Williams (Open University)

As part of the AHRC project 'Hugh Davies: Electronic Music Innovator', we staged several concerts of works by Hugh Davies, including *Galactic Interfaces*, *Quintet*, and *Not to be Loaded With Fish*.

Davies' live electronic works of the late 1960s—two of which we believe we have performed for the first time since the 1960s—are particularly significant, in that they represent the first substantive live electronic compositions by a British composer.

With an emphasis upon what we have learned through practice as research, also dependent upon archival research carried out at the British Library and at the Science Museum, our paper will focus upon issues of interpretation, realisation, and performance of these pieces from the social, technological and ontological perspectives.

We suggest that Davies was perhaps more concerned with establishing repertoires of techniques, materials and ways of being together than he was in works, and the instructions/scores for these pieces exemplify different aspects of this approach. This is particularly relevant since some elements in each piece - what is to be played; what technology should be used; actions; sounds; and various other elements - are indeterminate. Material choices, especially technological ones, clearly have substantive implications for the unfolding of a particular performance, but this is inflected to a great degree by whether there is any clarity in the first place about how things are meant sound or feel.

Performing these pieces has enabled us to interrogate both the social and technological aspects of the body of work, and particularly how these interact. We have drawn on historical practice as well as making use of contemporary technology, and our practice has led to interesting questions about distributed agency that can help form a more nuanced idea of the ontology of these pieces, and how that might relate to material and social affordances.

Session 6B: Technology and mediation II

Performing Cat Hope's *Tone Being* for tam-tam and sub-woofer using an electronic graphic score
Louise Devenish (University of Western Australia)

This lecture-recital explores the role of composer-performer collaboration in the realisation of indeterminate music using Cat Hope's *Tone Being* for tam-tam and sub-woofer as a case study. Commissioned by percussionist Louise Devenish as part of *Experimental Music for One Percussionist* (2016), the *Tone Being* score is an animated electronic graphic score, read in performance in the Decibel ScorePlayer iPad application. The ScorePlayer was developed by the ensemble Decibel in 2012 initially to perform scrolling graphic scores, and recent commissions from this author have led to evolution of the ScorePlayer to include the facility to display scores comprising a series of slides. The *Tone Being* score comprises a series of circular slides depicting the surface of the tam-tam. Each slide displays shapes representing non-rhythmic gestures to be drawn on the surface of the tam-tam by the performer using a variety of implements of their choosing including conventional percussion mallets and found objects. Elements of the slide notation that will be discussed here include representation and interpretation of duration, repetition and dynamics, use of coloured notation, and depiction of interaction between fixed and indeterminate material. Given that no two tam-tams exhibit identical acoustic properties (and each performer will have access to a unique tam-tam with different fundamental frequencies and resonances) the indeterminate aspects of the work allow for creative individual approaches to realising the work that encourages listening. This presentation provides an

overview of the approach and techniques used in realising the work, discussion of the rationale and performance of *Tone Being*.

Improvisation and indeterminacy in Pauline Oliveros' expanded instrument system
Ted Gordon (University of Chicago)

Before her sudden passing in 2016, Pauline Oliveros had been working on what she called her "Expanded Instrument System" (EIS) for nearly forty years. This system fed performers' improvisatory sound signal back to them via short time delays, allowing them to instantaneously respond to the feedback with their bodily organs. The composer-as-performer became implicated in what Oliveros called a "very unstable non-linear music making system:" a new kind of music-making that was equal parts composition and improvisation, located not only in the composer's mind, but also in her body.

Situating Oliveros' early work within discourses of systems theory and feminist theories of embodiment, this paper considers Oliveros' Expanded Instrument System as a critique of the integral, intentional, composerly subject. Through the "dance of agency" between fleshy and machinic organs, Oliveros developed a performance practice that radically reconfigured the role of the intentional mind. This presentation listens to an early work, *Beautiful Soop*, in order to explore the possibilities opened up by Oliveros' system. Her block diagram for this work, which pairs tape delay units with the Buchla Modular Electronic Music System, illustrates her development of a unique cybernetic music, emphasizing the embodied aspects of improvisation.

This paper engages the growing body of scholarship on Oliveros and mid-20th-century experimental music practices in order to investigate interpolations of body, instrument, and mind. Building on recent discussions of organology and science and technology studies, this paper shows how Oliveros' work (re-)configures musical networks of composer, performer, and instrument.

Concerts, performances and installations: programme notes

***One^{11} and 103* (1992)**
John Cage
(94 min, b&w, sound, 16 mm film on video)

Please note venue: School of Fine Art (see map on page 43)

Curated by Sam Belinfante (Centre for Audio Visual Experimentation (CAVE), School of Fine Art, University of Leeds)

Timings

Friday	10:00–21:00
Saturday	10:00–17:00
Sunday	10:00–17:00

In this double work, abstractions of light travel across and into the sounds and space created by artist and composer John Cage. While intended as a unified work, the piece must also be considered as a joining of two discrete works, each of which stands on its own. *One^{11}* is a composition "for solo camera man." Cage writes: "*One^{11}* is a film without subject. There is light but no persons, no things, no ideas about repetition and variation. It is meaningless activity which is nonetheless communicative, like light itself, escaping our attention as communication because it has no content to restrict its transforming and informing power." Of *103*, Cage writes: "*103* is an orchestral work. It is divided into seventeen parts. The lengths of the seventeen parts are the same for all the strings and the percussion. The woodwinds and the brass follow another plan... Following chance operations, the number of wind instruments changes for each of the seventeen parts." When these two works are played together, the title becomes *One^{11} and 103*. The piece was premiered in this manner in 1992 at the Cologne Philharmonie, by the Radio and Symphony Orchestra of the WDR. This video version was supervised by Cage.

Director of Photography: Van Theodore Carson
Director: Henning Lohner
Editor: Bernadine Colish
Writer/Composer: John Cage

Day 1: Friday 30 June

17:00–18:00, Clothworkers Centenary Concert Hall
Concert of submitted works

James Saunders (Bath Spa University)
sometimes we do what you say, but occasionally we don't **(2017) (15")**

sometimes we do what you say, but occasionally we don't is part of my ongoing series *things to do*. Each of the constituent pieces uses a set of spoken instructions in different categories (such as noises, pitches, devices and processes) which govern the actions to be made. Players respond to instructions they can hear by realizing the defined actions as soon as possible after they are spoken. The differences in each piece, and the relationships between the players, are determined by constraints which govern who each player responds to and who gives instructions. It creates modes of interaction between individuals, allows group behaviours to emerge, and reveals the personal characteristics of each performer in an immediate way. Players may use any instruments, sound-producing objects, devices or sound processing equipment (digital, analogue, or acoustic), and performances are characterised by the wide range of personal choices brought together as a group.

Michael Francis Duch, double bass (Norwegian University of Science and Technology)
Pauline Oliveros: *Horse Sings from Cloud* (1977) (15")

Pauline Oliveros (1932-2016) was a pioneer of electronic music and is best known as the founder of deep listening, which she described as "a way of listening in every possible way to everything possible to hear no matter what you are doing." In Oliveros' music listening is an important and integral part of the performance. One could of course argue that this applies to performing any kind of music, but in the case of Oliveros' music the act of listening informs the musical outcome.

One example is her verbal score *The New Sound Meditation* composed in 1989, where the performer(s) create a cycle of sounds; alternating between making "exactly the same sound as someone else has made" and making "a new sound that no one else has made". This composition is impossible to perform without listening thoroughly and intently to both fellow performers and any environmental sounds present.

We find something similar in Christian Wolff's music, although his music does not necessarily involve copying or recreating a sound, but using external sound sources as a means of musical coordination. In *Play* from his *Prose Collection* composed in 1968 "*a player should play (start or, with long sounds, start and stop or just stop) at a signal (or within 2 or 5 seconds of a signal) over which he has no control*". This is also impossible to perform without attentive listening to any sounds present during the performance. In both cases, what you listen to and chose to recreate or coordinate with, constitutes an indeterminate action: making it more or less impossible to predetermine what, how and when to play.

Pauline Oliveros' text piece *Horse Sings from Cloud* was composed in 1971*,* and was included in her anthology of verbal scores *Deep Listening Pieces* from 1990. The score consists of the following three sentences: "*Hold a tone until you no longer want to change the tone. When you no longer want to change the tone then change to another tone. Dynamics are free".* It somewhat resembles Karlheinz Stockhausen's verbal score *Richtige Dauern* (Right Durations) from *Aus den sieben Tagen* (1968), where one is supposed to "*play a sound"* and *"play it for so long until you feel that you should stop".* However, in *Horse Sings from Cloud* there is an interesting psychological challenge playing a tone to the brink of (relative) perfection, only having to change to another tone and start all over again. My own experience is that sometimes one can change tones often and other times one ends up playing only one tone during the entire performance.

In the accompanying commentary to this piece Oliveros suggests minimizing bow changes for strings and circular breathing for wind instruments and "listening to all the micro changes that are happening within the tone." This often results in a slow-paced and meditative music mainly consisting of long notes. Playing her deep listening music, often focussing on one sound, is similar to meditation. In *Horse Sings from Cloud* she simply suggests: "Be a witness."

Bent Duo (Cornell University / Hartt School of Music)
Casey Anderson: *ghostses* (2016) (25")

Casey Anderson (b. 1984) is a Los Angeles-based artist and composer whose work is influenced heavily by the DIY spirit of the experimental music scene in Southern California and the radical legacy of John Cage. His scores are largely text-based, often providing systems of instruction for performers to read texts, manipulate musical instruments and everyday objects, and engage with electronics and amplification. These instructions can be highly specific, but are generally stated in the simplest language possible; in his words, "minimal content yields maximum results." Anderson's work can be viewed as part of a movement by some composers of his generation away from highly determined scores while maintaining an affinity for complex sonorities and structures. It is also clearly a reflection of the profound impact that John Cage and other radical composers who developed musical concepts of indeterminacy had on the course of American music beginning in the 1950s.

The use of language in Anderson's work is innovative, but is also clearly related to existing traditions of indeterminacy. Whether in written form as performance instructions or in spoken form as performance content, language as both a functional and aesthetic component in indeterminate work has been central to concepts of musical indeterminacy for many artists. From the simple written instructions of La Monte Young's *Compositions 1960* to the elaborate incorporation of speech as a mode of performance by John Cage in performance-lectures such as *Indeterminacy: New Aspect of Form in Instrumental and Electronic Music*, language has often been integral to the development of practices of musical indeterminacy, and this tradition is continued and built upon in Anderson's work.

In *ghostses*, a work commissioned by Bent Duo in 2016, the performance is generated by a set of written instructions that establishes a system for distorting and transforming a fixed text. *ghostses* is for reading performers, orchestrated with a series of instruments including tuning forks, radios, harmonicas, and other small percussion instruments. The performers begin by selecting a text, which is then run through a Python program that generates five filtered versions of the original-- one each consisting exclusively of its nouns, verbs, adjectives, adverbs, and punctuation marks. These files are printed on transparencies which are randomly stacked atop each page of full text by each performer, and the resulting complex, multi-filtered pages of text are used as the score for the performance. The rate of the piece is controlled by each performer silently reading their own filtered version of the text and being triggered to engage with their respective instrumental arrays and spoken fragments of the text by the incidental overlap of the filtered transparencies. The musical content in the piece comes from the actions that are assigned to each category of speech isolated by the transparencies. As the performers work systematically through the text, what results is "a loosely coordinated distortion," a heterophonic texture of a barely comprehensible reading of the original text, punctuated by instruments, with moments of silence scattered throughout.

21:00, Friday 30 June – 08:00, Saturday 1 July
John Cage: *Organ²/ASLSP (As Slow as Possible)* (1987)
Diane Luchese, organist (Towson University)

Please note venue: St. Anne's Cathedral, Leeds City Centre (see map on page 44)

The starting times of the eight sections are given below:

1 (9:00 PM) 30 June 2017
2 (10:22'30" PM)
3 (11:45 PM)
4 (1:07'30" AM)
5 (2:30 AM)
6 (3:52'30" AM)
7 (5:15 AM)
8 (6:37'30" AM - 8:00 AM) 1 July 2017

Organ²/ASLSP was composed at the request of Gerd Zacher, who suggested to John Cage that he consider adapting his piano work, *ASLSP,* to the organ. The sustaining power of the organ presents a myriad of possibilities as to how one can interpret the "as slow as possible" tempo. For example, while Zacher's premiere performance lasted twenty-nine minutes, two other organists chose to interpret "as slow as possible" as a length that could fit onto a single CD recording. The John Cage Project in Halberstadt, Germany is interpreting "as slow as possible" to mean "for the potential lifetime of an organ." That performance, begun in 2001, is scheduled to last 639 years, making it the longest scheduled concert in history. The organ there is being built as the piece progresses, with sandbags playing the role of organist. This evening's realization will last eleven hours. This tempo is "as slow as possible" as to not interfere with the *Performing Indeterminacy* conference events.

Composed through chance operations, Cage's proportional notation indicates specific pitches whose durations are indicated via thick lines extending out from noteheads until the moment of their release. The pitches, their relative durations, and the "as slow as possible" tempo instruction for these eight movements are Cage's only performance directives. The unique color palette of each individual organ in its own acoustical environment and the absence of dynamic markings together ensure that registration and timbre are indeterminate.

NOTE: This is an uninterrupted and complete performance of the work, with adherence to the temporal proportions indicated and without intermissions. All silences in tonight's concert correspond to notated rests. The audience is invited to move about the room freely and experience the sounds from as many vantage points as desired. The audience is welcome to stay as little or as long as desired.

Day 2: Saturday 1 July

12:00, Clothworkers Centenary Concert Hall Foyer

Scott Mc Laughlin (University of Leeds)
***Cartographies of Sheet Metal* (2017) for multiple bowed-cymbal players**

Structure and material-indeterminacy. In *Cartographies…,* structure is an emergent property of the interplay between the score (principles directing human action/response to materials) and the weighted possibilities of the materiality. The players have a repetitive set of actions within a territory that responds indeterminately, led by the cymbal through the labyrinth of its vibrational mode. The score is as follows:

- Only bowed sounds: mostly single pitches, sometimes ambiguous multiphonics.

- One player is the guide, the others follow as a loose group: alternate guide and group bowing a single sound each.

- The guide bows a single pitch and attempts to repeat this every time their turn comes around. If a different pitch sounds then the guide must attempt to repeat that pitch, and so on.

- The group attempt to match the guide's pitch: octave equivalence is allowed.

- The guide can change to a different pitch voluntarily if: (a) all followers get as close possible to guide's pitch, or (b) if it becomes apparent that one or more follower cannot match.

The players seek unity, but their agency is coupled to the agency of the cymbal. The cymbal is made up of multiple overlapping modes of vibration that the players explore through muting: which selectively dampens some modes, allowing others to speak more clearly. The pitch of the cymbal is indeterminate but not arbitrary; there are hierarchies of pitch that the players can surf, but the specifics are always dynamically indeterminate to varying degrees. Players move between open searching (trying different muting points to find similar pitches to guide) and fine tuning (where the muting point is narrowed down but differences of grip and bow-pressure/speed/angle become important).

15:00, Clothworkers Centenary Concert Hall Foyer

Sophie Stone (Canterbury Christ Church University)
***"As Sure as Time…"* (2016–present)**

"As Sure as Time…" is part of an ongoing series of performances of which the same score is performed every time. The work is written for two or more spoken voices and the score includes instructions for a variety of structural elements, sound/vocal techniques and movements that the performers must choose from. The words are a quote from Harper Lee's *Go Set a Watchman* (2015): "As sure as time, history is repeating itself, and as sure as man is man, history is the last place he'll look for his lesson". This quote is split into four sections and each performer chooses a section to start with; the time of which each performer starts is a decision made by the individual performer. The starting performer must start with the first section and all the performers must end on the last section – the instructions for the structural elements allow the performers to make decisions on the order of the sections, repeats, and therefore the duration of the performance. The indeterminacy of *"As Sure as Time…"* is within the individual performances as the vocalists each perform a compositional process by choosing from a set of instructions, meaning that each performance will be different; with several performers, several compositional processes occur simultaneously and the realisation of each performance will be the result of multiple and simultaneous solo performances of different lengths.

When observing the series in its entirety it presents a new sense of extended duration with silences (no performative sound) separating the performances and the totality being the performance of the work itself. The work is an exploration and experimentation of my research questions which explore the function of silence, different performance situations and compositional strategies in extended duration music; every performance, workshop and rehearsal influence future performances. Each performance will focus on different types of silence (before, after or between sounds), different performance situations and locations (e.g. installation at a gallery and traditional concert performance), and compositional strategies (e.g. live electronics). This is the fourth performance of the series and, rather than a traditional concert performance, the listener can experience the work as an installation and explore the environment as they wish to.

20:00, Clothworkers Centenary Concert Hall

Christian Wolff: *Resistance* (for 10 or more players and a pianist) (world premiere)

John Cage: *Concert for Piano and Orchestra* (1957–58)

Performed by members of Apartment House.

Programme notes for the concert will be available on the door.

Contributor biographies

Robert Adlington
Robert Adlington holds the new Queen's Anniversary Prize Chair in Contemporary Music at the University of Huddersfield. He has published books on Birtwistle, Andriessen and Dutch avant-garde music in the 1960s, and edited volumes on the 1960s avant-garde, and music and communism. Recent articles and chapters have examined works by Berio and Nono, and the idea of musical modernism. He has recently embarked on a new project examining the relation of music and democracy, and is co-editing a volume on new music theatre in Europe between 1955 and 1975.

Apartment House
For over 20 years Apartment House has been captivating audiences with its performances of experimental and contemporary music. The group has performed all over Europe, from Oslo to Rome and from Barcelona to Vilnius, and is a firm feature on the British concert scene, with regular performances at Café Oto and a residency at the Wigmore Hall. Apartment House is the most frequently featured UK ensemble in the history of the Huddersfield Contemporary Music Festival and its John Cage portrait concert at the Queen Elizabeth Hall, Southbank Centre, won the group a Royal Philharmonic Society Award for outstanding contribution to Chamber Music and Song.

G. Douglas Barrett
G. Douglas Barrett is an independent scholar, artist, and composer. His artistic work has been discussed in publications like The Wire, Postmodern Culture, MusikTexte, and Guernica. Presenting throughout North America, Europe, and Japan, Barrett was a recent artist-in-residence at USF Verftet (Norway), the Virginia Center for the Creative Arts (VCCA), and the Catwalk Institute (New York). He has received grants from Akademie Schloss Solitude (Germany), DAAD, and Franklin Furnace (New York). His writing has been published in Postmodern Culture, Contemporary Music Review, Mosaic, Glissando, and Tacet. His book, After Sound: Toward a Critical Music, was published in 2016 by Bloomsbury.

Amanda Bayley
Amanda Bayley is Professor of Music at Bath Spa University. She is editor of *The Cambridge Companion to Bartók* (2001) and *Recorded Music: Performance, Culture, and Technology* (Cambridge University Press, 2010) for which she received the Ruth A. Solie Award from the American Musicological Society in 2011. Her research focuses on composer-performer collaborations, rehearsal analysis, and creative processes in different cultural contexts. Recent publications include a co-authored article in *Music Performance Research* with Neil Heyde on 'Communicating through Notation: Michael Finnissy's Second String Quartet' (2017). She is Co-Investigator on an ERC-funded project, *Beyond East and West: Developing and Documenting an Evolving Transcultural Musical Practice* (2015-2020).

Sam Belinfante
Dr Sam Belinfante (born 1983) is an artist living and working in London. Along with filmmaking and photographic work, his practice incorporates curating, sound and performance. Recent exhibitions include *The Curves of the Needle* at BALTIC 39, Newcastle; *The London Open* at Whitechapel Gallery, both 2015 and the solo show *Many Chambers, Many Mouths*, Southard Reid, London (2013). He curated and participated in *The Voice and The Lens*, IKON Gallery, Birmingham, which toured to Whitechapel Gallery as part of Spitalfields Festival in June 2014. Recent performances include *The Full Gamut* at Camden Arts Centre (2015) and *Corpus Sonus*, at Whitechapel Gallery (2015). Recently Belinfante won the Hayward Touring Curatorial Open. His exhibition *Listening* opened at BALTIC 39 in September 2014 and toured to the Bluecoat, Liverpool; Site Gallery, Sheffield and the Sheffield Institute of Arts Gallery; and Firstsite and Art Exchange, Colchester.

Bent Duo
Bent Duo is a NYC-based duo project investigating the limits of music for piano and percussion. The duo performs at a wide variety of venues and is equally committed to works that exploit the performers' virtuosic instrumental technique as to those that are developing new performance techniques entirely. Bent Duo members Bill Solomon and David Friend are established members of the NYC new music

scene. They perform regularly with groups including Ensemble Signal, American Composers Orchestra, Talujon Percussion, Alarm Will Sound, and the Bang on a Can All-Stars, and have performed at major venues and festivals around the world.

André Brégégère
André Brégégère is an Adjunct Professor of Music at Queensborough Community College and William Patterson University. He received his doctorate in Composition from the Graduate Center, CUNY, with a dissertation on the music and theoretical work of Henri Pousseur. His recent and ongoing scholarly work includes "L'Apothéose de Rameau: A Study of Henri Pousseur's 'Network Technique'" (SMT St-Louis, 2015), and "The Serial Concept in Pousseur's Votre Faust" (Oxford Handbook of Faustian Music, OUP, forthcoming). His music has been performed in the US and Europe by leading ensembles; broadcasted on WQXR, WNYC, and WPRB; and released on the label New Dynamic Records. – www.abregegere.com

William Brooks
William Brooks studied musicology and composition at Wesleyan University and the University of Illinois. Currently Professor at the University of York and Emeritus Professor at the University of Illinois, he is also a Senior Research Fellow at the Orpheus Research Centre in Music, Belgium. He has investigated aspects of open form over four decades in compositions from *Untitled* (1972) to *Encounters* (2017) and in writings that include two chapters in the *Cambridge Companion to John Cage* and a recent series of articles entitled 'In re: Experimental ——— [Music / Analysis / Education].'

Louise Devenish
Louise Devenish is a percussionist whose practice incorporates performance, research and education. Key projects include award-winning series *Music for One Percussionist*, co-directing *The Sound Collectors* duo, percussing for Australia's leading percussion group *Speak Percussion* and electroacoustic sextet *Decibel*. A passionate advocate of new and Australian music, Louise has commissioned 50 works for percussion and premiered countless others throughout Australasia, Europe, North America and the UK. Head of Percussion at the University of Western Australia, research areas include Australian music, performance practice and composer-performer collaboration. Louise is currently writing a book on Australian contemporary percussion history for Routledge's Research in Music series.

Ryan Dohoney
Ryan Dohoney is assistant professor of musicology at Northwestern University. He writes on modernism and experimentalism in the 20th and 21st centuries and has particular interests in the musical communities around Morton Feldman, Julius Eastman, and Wandelweiser. He also writes on issues in music philosophy. His work today is drawn from an in-progress book project titled "For Morton Feldman: Friendship, Collaboration, and Mourning in the New York School." His work has been supported by a fellowship from the American Council of Learned Societies and grants from the American Philosophical Society and the Paul Sacher Foundation.

Michael Francis Duch
Michael Francis Duch (1978) is a double bass-player and Associate Professor at the Department of Music, Norwegian University of Science and Technology (NTNU) in Trondheim. He completed his project "Free Improvisation – Method and Genre: Artistic Research in Free Improvisation and Improvisation in Experimental Music" through the Norwegian Artistic Research Fellowship Programme at NTNU late October 2010. He has been involved in more than 60 recordings, including the critically acclaimed *Cornelius Cardew: Works 1960-70* with the trio Tilbury/Duch/Davies. He regularly performs improvised and composed music both solo and with various ensembles. Michael Duch is a member of the Young Academy of Norway.

Lawrence Dunn
British composer, improviser, pianist, percussionist born in London. Musical interests include melody and harmony, experimentalism, remembering, personhood. Recent pieces include one for soprano Juliet Fraser, an orchestra work programmed at Tectonics with Ilan Volkov and the BBC Scottish Symphony Orchestra, and a piece for violinist Sarah Saviet presented at Aldeburgh in July. A new string quartet will be premiered by Quatuor Bozzini in Aberdeen in October. Written for *Tempo*, and

is the editor of the Huddersfield Cerenem Journal. An essay on Jürg Frey for *Music & Literature* is forthcoming. Presently continuing a doctorate at Huddersfield with Bryn Harrison and Philip Thomas.

Mack Enns
Mack Enns is a PhD candidate in Music, in the musicology doctoral program at Western University. He is interested in game scoring, or the act of composing music for and through gameplay. He has represented this interest since 2013, when he delivered a paper on game scoring at the Innovation in Music conference in York, UK, the proceedings of which were published in a journal. Since then Mack has written a Master's thesis on game scoring, and his current mission is to develop an installation that highlights indeterminate aspects of music in games.

Ted Gordon
Ted Gordon is a PhD Candidate in the History and Theory of Music at the University of Chicago. His writing has been published by *AVANT*, the Library of Congress, AMS *Musicology Now!*, and *Cultural Anthropology*. His dissertation project, "Bay Area Experimentalism: Music & Technology in the Long 1960s", follows musicians through the intersecting worlds of experimental music, systems theory, electronics, and spirituality. He is an active improvising musician in the Chicago area, performing on viola and the Buchla Music Easel.

Nicasio Gradaille
Nicasio Gradaille studied piano in Spain and Switzerland (Basle), where he received the Konzertreifediplom (Performance Diploma). He also received First Prize in the International Piano Competition "Xabier Montsalvatge", Girona, for 20th Century piano music. He is a piano teacher at Conservatorio Superior de Música de Vigo, where he leads the Contemporary Piano Music Class. He recorded the *Sonatas and Interludes* of John Cage for the Radio Galega and completed his PhD (on Cage´s *Solo for Piano*) at the University of Vigo (Spain). He is the pianist in Taller Atlántico Contemporáneo (TAC Ensemble), Santiago de Compostela.

Anthony Gritten
Anthony has published in visual artists' catalogues, philosophy dictionaries, and on subjects including Stravinsky, Cage, Delius, Bakhtin, Lyotard, Nancy, gesture, distraction, problem solving, ergonomics, listening, timbre, empathy, collaboration, and technology. Downloads are available from https://ram.academia.edu/AnthonyGritten. A Fellow of the Royal College of Organists, his performances have included several UK and Canadian premieres of works by Daniel Roth, and complete anniversary cycles of the works of Tunder, Buxtehude (a 6½ hour recital), Homilius, Mendelssohn, and Brahms.

Sara Haefeli
Sara Haefeli teaches music history and philosophy of creativity classes at Ithaca College. She is a specialist in the music of the American Avant Garde, especially the work of John Cage. Her scholarship has been published in the journal American Music, the Journal of Music History Pedagogy, and she is a regular contributor to W. W. Norton's blog The Avid Listener. She has presented at national conferences on topics ranging from the music of Cage and the New York School to why our brains need music. She was recently the invited guest scholar for the festival Nuit d'Hiver in Marseille, France. In addition to her scholarly work, Haefeli was co-director of the Open Space Festival for New Music from 2009-2011. She is also an accomplished cellist, specializing in both early music and contemporary music performance.

Tom Hall
Tom HALL is a UK-based Australian composer, performer and writer on music with interests in both acoustic and live electronic music. Much of his music combines composed, algorithmic and improvisatory elements often using multichannel or individually experienced mobile sound. Recent collaborative performances and installations share some form of digital notations with the audiences and involve notions of flow and slowness. Hall's musicological interests include early tape, electronic and UK computer music, and the music of Morton Feldman. From August 2017 Tom is taking up the post of Programme Director for the BMus degree in Creative Music Technology at the University of Surrey.

Roddy Hawkins

Roddy Hawkins is a musicologist and Lecturer in Music at the University of Manchester. Working primarily in contemporary music studies his current research is focused around the production and consumption of avant-garde music in Britain during the 1970s and 1980s. With a focus on the emergence of the grouping and name New Complexity, his research explores material culture, creative labour, aesthetic discourse, performance practice and critical reception; central to this research is the contested, gendered and constructed nature of marginality as it relates to the categories of sound and listening.

Christopher Haworth

Christopher Haworth is a musicologist and composer with interests in the history and theory of electronic music. His current research focuses on the musical uses of computer networks from the late 1970s to the present, while another project uses computational methods to track and analyse the changing aesthetic, social and communicative uses of the internet from the mid 1990s to the present. He is a lecturer in music at University of Birmingham where he teaches courses in experimental music and sound art, electronic music studies, and music perception.

John Holzaepfel

John Holzaepfel received his Ph.D. in historical musicology from the City University of New York, where he wrote his dissertation, *David Tudor and the Performance of American Experimental Music, 1950-1959*. He has written extensively on David Tudor's work as a pianist and is currently completing a critical edition of Tudor's realization of John Cage's *Solo for Piano* for the series Music of the United States of America (MUSA). His biography of David Tudor will be published by the University of Illinois Press.

Martin Iddon

Martin Iddon is a composer and musicologist. His musicological research has largely focussed on post-war music in Germany and the USA. His books *New Music at Darmstadt* and *John Cage and David Tudor* are both published by Cambridge University Press. A portrait CD, *pneuma*, was released by another timbre in 2014. His music is published by Composers Edition. He is Professor of Music and Aesthetics at the University of Leeds.

Tomke Kossen-Veenhuis

Tomke studied recorder performance and musicology at Folkwang University of the Arts Essen. In 2012 she went to pursue her master's degree at the University of Edinburgh. Following up her undergraduate and master dissertations' outcome, Tomke researches contemporary music and dance collaborations in progress for her PhD under supervision of Prof Simon Frith in Edinburgh since 2013. Here, she mainly focusses on problem solving as part of these processes, understanding the creative pathway in performance production as well as the different artists' collaborations and relationships. This stems from Tomke's strong interest and active engagement in music and dance performance herself.

Laura Kuhn

Laura Kuhn began working with John Cage in N.Y. in 1986 and upon his death in 1992 founded the John Cage Trust, which she has since served as Executive Director. In 2007, the John Cage Trust joined the ranks of Bard College, where Kuhn became the first John Cage Professor of Performance Arts. In celebration, she directed a performance of Cage's still politically prescient theater piece, *Lecture on the Weather*, with a cast that included Merce Cunningham, Jasper Johns, John Ashbery, and Leon Botstein. She recently completed *The Selected Letters of John Cage* (Wesleyan University Press, 2016).

Catherine Laws

Catherine Laws is a musicologist and pianist. She is a Senior Lecturer in Music at the University of York, UK, and a Senior Artistic Research Fellow at the Orpheus Institute, Ghent. As a performer Catherine specializes in contemporary music, working collaboratively with composers and often drawing other artists, especially theatre and film makers, into her projects. Her practice-led research is focused variously on processes of embodiment, subjectivity and collaboration in contemporary performance practices, and she currently leads the research cluster 'Performance, Subjectivity and

Experimentation' at the Orpheus Institute. Much of her musicological work examines the relationship between music, language and meaning, with a particular focus on the musicality of Beckett's work and composers' responses to it. She has published many articles in this field and her book, *Headaches Among the Overtones: Music in Beckett/ Beckett in Music*, came out in 2013 (Editions Rodopi).

Mirna Lekić
Pianist Mirna Lekić is active as a recitalist, chamber musician and educator. She has performed in the United States, Canada, and Europe, at venues including Carnegie-Weill Hall, Symphony Space, World Trade Center, Chicago Cultural Center, St. Martin-in-the-Fields in London, and Théâtre de l'Ile Saint-Louis and Théâtre de la Vieille Grille in Paris. Her solo performances have been broadcast on WQXR, WNYC, WFMT, WPRB, and Bosnian TV and radio stations, and her debut solo album, Masks, was released in 2017 by Centaur Records. Mirna currently serves as Assistant Professor of Music at Queensborough Community College. (www.mirnalekic.com)

Diane Luchese
Diane Luchese is a Professor of Music Theory at Towson University. Additionally she freelances as an organist/choir master in the Baltimore, MD region. Her recital performances primarily feature early and contemporary works. In 2009 Luchese performed John Cage's *Organ2/ASLSP* in a 15-hour uninterrupted performance at Towson University, becoming the first individual to perform Cage's work over an extended time scale. Her recording on the Raven CD label, *Light and Dark and In Between*, was conceived to serve as a time capsule sampling the present world of the organ, featuring representative contemporary music played on four different styles of pipe organs.

Scott Mc Laughlin
Scott Mc Laughlin is a composer and improviser based in Huddersfield, UK. Born in Ireland (Co. Clare) in 1975. He lectures in composition and music technology at the University of Leeds. His research focuses on contingency and indeterminacy in the physical materiality of sound and performance, combining approaches from spectral music and experimental music with dynamical systems theory to explore material agency and recursive feedback systems in constraint-based open-form composition.

Chris Melen
Dr Chris Melen is a Research Assistant whose main role within the Cage Concert project is the development of the project website. In addition to documentary and analytic resources, this site will contain apps which will allow users to interact with the piece's notations, to create new realisations and audio versions, and gain a better understanding of the piece's myriad techniques and compositional processes. Chris studied music at Cardiff University, being awarded a BMus (1st class) in 2001, then continued at Cardiff with a PhD in Composition, under the supervision of distinguished composer Anthony Powers. He continues to compose, and his music has been performed both in the UK and abroad. He currently works mainly in the instrumental field, but has also written works involving electronics, and music for amateurs. He has a long-standing interest in computer-aided composition, and has used IRCAM's OpenMusic computer-aided composition environment extensively. Since leaving Cardiff in 2006 Christopher worked mainly as a programmer and web developer, working in fields as diverse as web-based music applications and text analytics.

Jeremy Millar
Jeremy Millar is senior tutor and pathway leader in Critical Practice, and tutor in Critical Writing in Art and Design, Royal College of Art, London. He curated *John Cage: Lecture on the Weather* at Frith Street Gallery, London (2016), and conceived the touring exhibition *John Cage: Every Day is a Good Day* (Hayward Touring, 2010–11); he also developed the accompanying publication, for which he wrote an introductory essay, and interviewed a number of key collaborators of Cage's, including Laura Kuhn, Ray Kass, Kathan Brown, and Julie Lazar.

Úna Monaghan
Úna Monaghan is a harper, composer and sound engineer from Belfast. She is currently a Junior Research Fellow in Music at Newnham College, Cambridge. Her research examines the intersections between Irish traditional music, experimental music practices, improvisation and interactive

technologies. Her recent artistic work has combined traditional music with bronze sculpture, sound art and movement sensors. She has a PhD in New Technologies and Experimental Practices in Contemporary Irish Traditional Music, and has held artist residencies at McGill's Institute for the Public Life of Arts and Ideas, Montréal and the Centre Culturel Irlandais, Paris.

James Mooney

James Mooney is a Lecturer in Music Technology and Director of Impact and Innovation at the School of Music, University of Leeds. His research focuses upon electroacoustic music history (especially the work of Hugh Davies) and the relationships between musical instruments/technologies and musical practice, as viewed through the lens of science and technology studies (STS). His recent work has been published in the *Science Museum Group Journal*, and in *Organised Sound*, whose special issue on 'Alternative Histories of Electroacoustic Music' he has just finished editing.

Michael Parsons

Michael Parsons has been active since the 1960s as a composer, performer and writer on music. In 1969 he was co-founder with Cornelius Cardew and Howard Skempton of the Scratch Orchestra. His music generally reveals a preference for clarity of structure, economy of material and an objective approach to sound and performance. Recent works involve varying degrees of indeterminacy, flexible instrumentation and different levels of technical ability. A CD of his instrumental music performed by Apartment House and Philip Thomas is in preparation and will be released later this year on the HCR label (Huddersfield Contemporary Records).

Emily Payne

Emily Payne is a Postdoctoral Research Assistant at the University of Leeds, working on the AHRC project, 'John Cage and the *Concert for Piano and Orchestra'*. She undertook her doctoral studies at the University of Oxford, employing ethnographic methods to investigate the creative processes of clarinet performance. Research interests include psychological and anthropological approaches to the study of musical performance (particularly of 20th-century musics), creativity, skill, and collaboration. Her work is published in *Contemporary Music Review*, *cultural geographies*, *Musicae Scientiae*, and is forthcoming in *Music & Letters.* Emily also works as an Academic Studies Tutor at the Guildhall School of Music & Drama.

Julian Peterson

Julian Peterson is a musician, programmer, and sound designer. In his position as Audio Programmer for Gearbox Software, he designs and implements audio features for major Gearbox projects, including his first major release, Battleborn (2016). Julian received his DMA in music composition from Arizona State University, where his research primarily focused on sound synthesis, generative music, and interactive music systems. His other research interests include sound propagation and virtual acoustics, musical improvisation and open-forms, the history and implementation of video game audio, and the pedagogy of electronic and digital music.

Benjamin Piekut

Benjamin Piekut studies experimental, improvised, and popular musics after 1960. His first book, *Experimentalism Otherwise*, was published in 2011 by the University of California Press. He is also the editor of *Tomorrow Is the Question* (Michigan, 2014) and co-editor (with George E. Lewis) of the *Oxford Handbook of Critical Improvisation Studies* (2 volumes, Oxford, 2016). His new book is titled *The World is a Problem: Henry Cow and the Vernacular Avant-garde.* With Jason Stanyek, he co-authored "Deadness: Technologies of the Intermundane," which won the Outstanding Article award from the Association for Theatre in Higher Education in 2011. He is an associate professor and Director of Graduate Studies in Music at Cornell University.

Irene Revell

Irene Revell is a curator whose work seeks out new contexts and connections for practices with challenging social and political implications. Much of her work since 2004 has been with the London-based curatorial agency Electra. She is Visiting Curator on the MA Sound Arts at London College of Communication where she now holds an AHRC TECHNE award for doctoral research. Major curatorial projects include *Cinenova Now Showing* (LUX, The Showroom et al, ongoing since 2015);

Charming for the Revolution: A Congress for Gender Talents and Wildness (The Tanks, Tate Modern, 2013); *Her Noise: Feminisms and the Sonic* (Tate Modern, 2012).

James Saunders
James Saunders is a composer who makes open form compositions that explore group behaviours and decision making. His music has been played at Borealis, Darmstadt, Donaueschingen, hcmf//, Music We'd Like to Hear, Ostrava, Spitalfields, SPOR, Ultima, and Witten. James has worked with Apartment House, Arditti Quartet, asamisimasa, EXAUDI, London Sinfonietta, Ensemble Modern, Neue Vocalsolisten, Plus-minus ensemble, ensemble recherche, and SWR Sinfonieorchester. He studied at the University of Huddersfield and the RNCM, and is Professor of Music at Bath Spa University. James is currently working on a new commission for Ictus Ensemble to be performed at Donaueschingen in October. For more information, please visit www.james-saunders.com.

Floris Schuiling
Floris Schuiling is a Veni postdoctoral fellow at Utrecht University, the Netherlands. His current research investigates "notation cultures" in contemporary music, exploring the role of music notation in the social and creative processes of music-making. This project is funded by the Netherlands Organisation for Scientific Research (NWO).

Nadine Scharfetter
Nadine Scharfetter obtained her Master's degree in musicology at the University of Music and Performing Arts Graz (KUG) and the University of Graz. While studying, she worked for various cultural institutions, KUG, and the Institute of Musicology at the University of Graz. Nadine received several scholarships and awards for her academic achievements. In October 2014, she started her PhD at KUG, focusing on the aspect of corporeality in Dieter Schnebel's experimental musical theatre. In 2016, Nadine worked as a university assistant at the Centre for Gender Studies (KUG). She currently holds a DOC fellowship of the Austrian Academy of Sciences.

Omri Shimron
Omri Shimron is an Assistant Professor of Music and Coordinator of the piano area at California State University East Bay. Since 2013 he has also taught at the Rebecca Penneys Piano Festival. His solo CD, featuring Rzewski's "The People United Will Never Be Defeated!" was released in 2014 on New Focus. Shimron has given recitals across the United States as well as in Italy, Turkey, Israel, France, and the UK. He frequently presents lecture-recitals for the College Music Society, and at many colleges and universities. He holds a DMA, MM, and MA from the Eastman School of Music.

Kirsten L. Speyer Carithers
Dr. Carithers recently completed the PhD in musicology with an emphasis on experimental music performance, graduating from Northwestern University in spring 2017. Research and teaching interests include experimentalisms, music and technology, and the intersections between indeterminacy, improvisation, and creative labor. She has completed certificates in Critical Theory and Teaching at Northwestern, and is a member of the Diversity & Inclusion committee within the AMS Pedagogy Study Group. She has presented her research at the American Musicological Society, the Society for American Music, and the Modernist Studies Association, and will begin as a Lecturer at Ohio State University in August.

Jessica Stearns
Jessica Stearns is currently pursuing a PhD in musicology with a minor in art history at the University of North Texas. Her dissertation research explores Christian Wolff's notation and its context in the milieu of the New York School. Jessica's research interests include music of the twentieth and twenty-first century, American music, notation, performance spaces, and sound studies.

Sophie Stone
Sophie Stone is a composer and PhD student at Canterbury Christ Church University working under the supervision of Dr Lauren Redhead and Prof Matt Wright. Her research explores extended duration music which offers new perspectives on the use and function of silence in combination with location, performance situations and compositional strategies within the field of experimental music.

Philip Thomas
Philip Thomas specialises in performing experimental music as a soloist and with leading experimental music group Apartment House. Recent solo projects have included premiere performances of works by Jurg Frey, Michael Finnissy, Howard Skempton and Christian Wolff; programmes of Canadian and British experimental music; and a survey of Christian Wolff's piano music. CD releases include a triple-CD set of Wolff's solo piano music, music for multiple pianos by Morton Feldman, and music by Laurence Crane, Christopher Fox, Jurg Frey, Tim Parkinson, Michael Parsons, Michael Pisaro and James Saunders. He has also performed recently with pianists Mark Knoop, Catherine Laws, Ian Pace and John Tilbury, and with the Merce Cunningham Dance Company. He is currently Professor of Performance at the University of Huddersfield, co-Director of CeReNeM, and co-editor of *Changing the System: The Music of Christian Wolff* (Ashgate Publishing, 2010).

Patrick Valiquet
Patrick Valiquet is a Canadian musicologist studying the intersection of experimental music, politics and technoscience. In 2014 he earned his doctoral degree from the University of Oxford, where he worked as a research associate on the European Research Council Seventh Framework project Music, Digitisation, Mediation: Towards Interdisciplinary Music Studies. Since then he has held fellowships at the University of Edinburgh and the Institute of Musical Research, Royal Holloway, University of London. He is also Associate Editor of Contemporary Music Review.

Christian Wolff
Born in 1934 in Nice, France, Christian Wolff has lived in the U.S. since 1941. He is frequently associated with John Cage (with whom he studied briefly), Merce Cunningham, Morton Feldman, David Tudor and Earle Brown, then with Frederic Rzewski and Cornelius Cardew. He taught Classics at Harvard (1962-70) and Classics, Music and Comparative Literature at Dartmouth College (1971-1999) and has published articles on Greek tragedy, in particular, Euripides. His writings on music have been collected in the book *Cues* (published by MusikTexte) and, this year, *Occasional Pieces* (Oxford University Press), whilst a collection of essays about his music (*Changing the System: the music of Christian Wolff* (Ashgate Publications)) was published in 2010, edited by Stephen Chase and Philip Thomas. He has been active as performer and improviser with, among others, Takehisa Kosugi, Keith Rowe, Steve Lacy, Christian Marclay, Larry Polansky, Kui Dong and AMM. All his music is published by C.F. Peters, New York and much of it is recorded (Mode, New World, Neos, Sub Rosa, Capriccio, Wandelweiser, Wergo, Matchless, Tzadik, HatArt, etc.). He holds honorary degrees from California Institute of the Arts and from Huddersfield University (UK), membership of the Akademie der Kuenste, Berlin, and the American Academy of Arts and Sciences, and a lifetime achievement award from the state of Vermont.

Michelle Yom
Michelle Yom is an improviser/composer/flutist living in Berlin. She is starting her PhD in musicology this Fall at The Graduate Center at CUNY.

Performance Studies Network

The international Performance Studies Network comprises professional and amateur musicians, scholars working in a range of musicological disciplines (including music history, analysis, psychology, pedagogy, ethnomusicology and composition) and colleagues from the creative industries.

Fifth International Conference: 5–8 July 2018
The fifth international conference of the Performance Studies Network will be held at the Norwegian Academy of Music, Slemdalsveien 11, 0363 Oslo, Norway. This is the first PSN conference to be held outside the United Kingdom and marks an important development in its international status as a key event for those working in this dynamic area of musical study.

Further details, including the Call for Papers, can be found on the conference website:
http://psn2018.org/.

Socialising in Leeds

This is a small selection of places to eat and drink in the vicinity of the conference, if you have some free time.

Pubs

The Faversham
On-campus pub serving food and drinks, with a big outside seating area. 1–5 Springfield Mount, Leeds West LS2 9NG. http://www.thefaversham.com/

The Fenton
Independent boozer close to the School of Music, with a friendly dog. A regular haunt of the School of Music staff. Doesn't offer food. 161 Woodhouse Lane, Leeds LS2 3ED.
http://thefentonleeds.com/

Nation of Shopkeepers
American-style bar serving craft beers, cocktails, milkshakes, burgers, fried chicken, etc. 26–27 Cookridge Street, Leeds LS2 3AG. https://www.anationofshopkeepers.com/

North Bar
Excellent craft beer pub. 24 New Briggate, Northern Quarter, Leeds LS1 6NU.
http://www.northbar.com/

The Reliance
Slightly further away from the conference (about a 15-minute walk) but serves excellent modern British food (including home-cured charcuterie), as well as a great range of beers. 76–78 North Street, Leeds LS2 7PN. www.the-reliance.co.uk

Cafés/restaurants

There is a string of cafés and a Tesco supermarket opposite Parkinson Steps, a 5–minute walk from the School of Music. The best of these are:

Bakery 164
A bakery serving delicious takeaway gourmet sandwiches, Italian breads and espresso. 164 Woodhouse Lane, Leeds LS2 9HB. https://bakery164.com

Opposite Café
Serves good coffee, sandwiches and cakes. (Closed in the evening.) 26 Blenheim Terrace, Leeds LS2 9HD. http://www.oppositecafe.co.uk/

Rustica
Family-run pizzeria and burger restaurant. Open in the evenings, and also offers a takeaway service. 30 Blenheim Terrace, Leeds LS2 9HD. https://rusticarestaurant.co.uk/

Places a little further afield, but no more than a 15-minute walk:

Bulgogi Grill
Korean table barbecue restaurant. The Arena Quarter, 9 Merrion Way, Leeds LS2 8BT.
http://www.bulgogi-grill.co.uk/

Fairuz
Lebanese restaurant with a great mezze menu. Fairfax House, Lower Ground Floor, Leeds LS2 8JU. http://www.fairuzleeds.co.uk/

Hansas
Gujarati vegetarian restaurant established 30 years ago. The thalis are highly recommended. 72/74 North Street Leeds LS2 7PN. http://hansasrestaurant.com/

Kaveris Kitchen
Offers a menu of South and North Indian cuisine, including possibly the most delicious paratha in Leeds. 72, New Briggate, Leeds LS1 6NU. http://www.kaveriskitchen.com/

Red Chilli
Classic Beijing and Sichuan restaurant. 6 Great George St, Leeds LS1 3DW. http://redchillirestaurant.co.uk/leeds/

Teppanyaki
Japanese Teppanyaki restaurant, with chefs cooking on tableside hotplates. Belgrave Hall, Belgrave Street, Leeds LS2 8DD. http://www.teppanyakileeds.com/

The Swine that Dines
Offers a menu of modern British small plates, with locally sourced ingredients. 58 North Street, Leeds LS2 7PN. http://www.thegreedypigkitchen.co.uk/the-swine-that-dines

Zaap
Excellent Thai street food. Grand Arcade, Leeds LS1 6PG. https://www.zaapthai.co.uk/leeds

Practical information

Contact numbers

If you have problems on arrival in the UK or need to get in touch, you can contact us as follows:

Emily Payne: +44 (0)7816 401211
Philip Thomas: +44 (0)7713603008

Venues

School of Music (conference venue)
University of Leeds
Leeds LS2 9JT
Reception: +44 (0)113 343 2583

Storm Jameson Court (conference accommodation)
Storm Jameson Court
Charles Morris Hall
Mount Preston Street
Leeds LS2 9JP
Reception: +44 (0)113 343 2750
https://www.meetinleeds.co.uk/venue/storm-jameson-court/

School of Fine Art (venue for *One^{11} and 103* screening)
University Road
University of Leeds
Leeds LS2 9JT

St. Anne's Cathedral (venue for performance of *Organ^2: ASLSP*)
Great George Street
Leeds LS2 8BE

Travel

Leeds Train Station
New Station Street
Leeds LS1 4DY

There is a direct train service from Manchester Airport to Leeds train station. A one-way ticket will cost approximately £25 and the journey will take around one hour 20 minutes.

You can get from the train station to the university campus on foot, by taxi or by bus. A taxi ride will take about 10 minutes and it will cost approximately £5.

From the train station by bus:
We advise you to take bus No. 1 which departs from Infirmary Street. The bus runs approximately every 10 minutes and the journey takes 10 minutes. You should get off the bus just outside the Parkinson Building.

National Rail Enquiries
http://www.nationalrail.co.uk/stations_destinations/LDS.aspx
+44 (0)345 748 4950

Leeds City Bus / Coach Station
Dyer Street
Leeds LS2 7LA

There are regular coach services from Leeds coach station to all UK airports, including Leeds Bradford, Manchester, London Heathrow and London Gatwick. These routes are mainly operated by National Express, and to get the cheapest fares you need to book online in advance.

From the coach station by bus:
If you arrive by coach you can catch bus numbers 6, 28 or 97 to the University (Parkinson Building).

National Express (coach company)
www.nationalexpress.com
+44 (0)871 781 8181

West Yorkshire Metro (local bus service)
http://www.wymetro.com/
+44 (0)113 245 7676

Taxis
| Amber Cars	Royal Cars Leeds
www.taxilleeds.co.uk	http://royalcarsleeds.com
+44 (0)113 2022117	+44 (0)113 230 5000

Uber operates in Leeds.

If you are travelling to the conference by taxi, ask to be dropped off at Parkinson Steps.

Campus map

An interactive campus map can be found here: https://www.leeds.ac.uk/campusmap

School of Music (conference venue)

Parkinson Building and Tower
Security Office
0113 343 5494
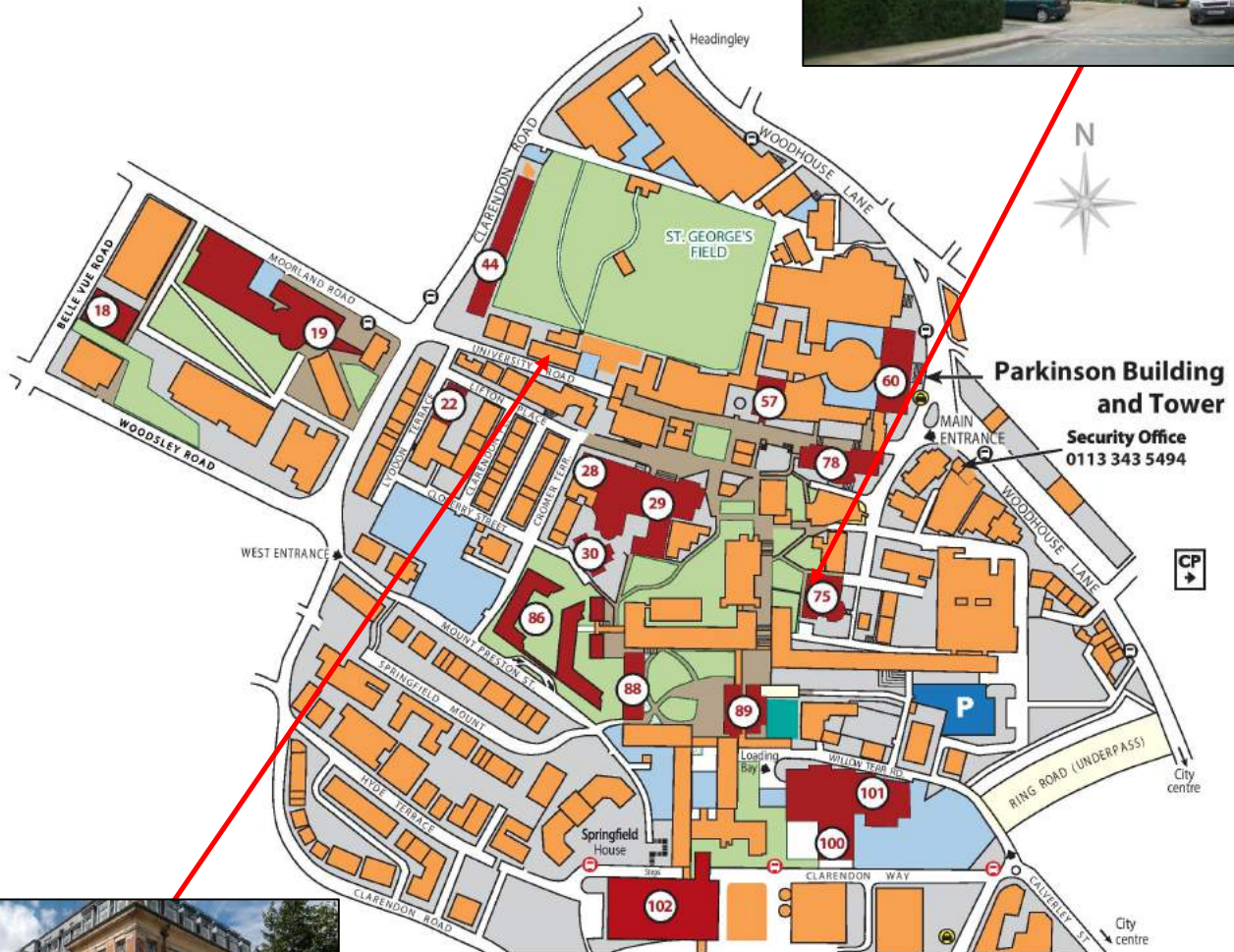
School of Fine Art (venue for *One[11]* and *103* screening)

Car parks
University visitors' car parks (limited access) [P]
Other university car parks
Public multi-storey car park

Other useful information
CityBus Stop   Bus Stop
Taxi Rank
Pedestrian Only Area
Lawns

All venues on campus

18. Western Lecture Theatre	60. Parkinson Building
19. Leeds University Business School (LUBS)	75. School of Music
22. Ellerslie Hall	78. Michael Sadler Building
28. University House	86. Charles Morris Hall (Dobree House, Storm Jameson Court, Whetton House)
29. Refectory & Leeds University Union	88. Staff Centre
30. Lyddon Hall	89. Roger Stevens Building
44. Henry Price Residence	100. Conference Auditorium
57. Great Hall	101. Sports & Exhibition Centre/The Edge
	102. Worsley Building

City map

A660 Otley/Skipton
Bodington Hall
Headingley
Leeds & Bradford Airport

MAIN ENTRANCE

KEY:

One-way traffic

No Car Access

Tunnel

Parkinson Building and Tower

WOODHOUSE MOOR

CLARENDON ROAD

A61 Harrogate
A58 Wetherby
A1 North
Moortown/Chapeltown

Sheepscar
Interchange

THE
UNIVERSITY
OF LEEDS
CAMPUS

WOODHOUSE LANE

BBC

RING ROAD

INNER

LEEDS
METROPOLITAN
UNIVERSITY

PORTLAND WAY WOODHOUSE LANE

CLAY PIT LN

CIVIC
HALL

MERRION
CENTRE

NORTH STREET

St. James's
University Hospital
A1-M1 Link Road
A64 York
A63 Selby

LEEDS
GENERAL
INFIRMARY

CALVERLEY STREET

COOKRIDGE ST

PARK LANE
COLLEGE

TOWN
HALL

ST.
JOHN'S
CENTRE

A64(M) INNER RING ROAD

BURLEY ROAD

WESTGATE

THE HEADROW

EASTGATE

EAST PARADE

PARK ROW

ALBION STREET

HEADROW
CENTRE

BRIGGATE

VICAR LANE

NATIONAL
EXPRESS
COACH
STATION

WEST YORKSHIRE
PLAYHOUSE

DUKE STREET

INFIRMARY STREET
Buses 1, 93, 95 to
Parkinson Building,
University

INFIRMARY ST.

KINGS ST

QUEBEC ST

CITY SQ

LEEDS
SHOPPING
PLAZA

KIRKGATE
MARKET

CENTRAL
BUS
STATION

QUARRY HOUSE

WELLINGTON STREET

AIRE STREET

BOAR LANE

CORN
EXCHANGE

KIRKGATE

M621, M62 West,
A647 Bradford,
A58 Halifax,
A62 Huddersfield,

River Aire

LEEDS CITY STATION

THE CALLS

River Aire

CROWN POINT ROAD

HILTON
HOTEL

NEVILLE STREET

Leeds & Liverpool Canal

M1 SOUTH
M621 (M62)

M1 SOUTH
M621
M62 EAST
A61 Wakefield

**St. Anne's Cathedral
(venue for performance of
$Organ^2$: ASLSP)**
Corner of Great George St.
and Cookridge St.
Leeds LS2 8BE

Notes

Notes