MANCHESTER 1824
The University of Manchester

Sines & Squares Festival

sines-squares.org

Celebrating the resurgence of Analogue and Modular Synthesizers

24-26 October 2014

Organised by:
NOVARS Research Centre
Open-Circuit / Islington Mill, Salford
Basic-Electricity Berlin

SUPPORTERS:

Sines & Squares Festival is kindly supported by Thonk, Expert Sleepers, Bugbrand, Moog Music, Analogue Systems, KOMA Elektronik, Source Distribution, Islington Mill Studios, Frequency Central, Analogue Solutions, Korg littleBits, Basic Electricity, Open Circuit and it is featuring the MANTIS Surround Sound System

Sines & Squares Festival
Analogue and Modular Synthesis
24-26th October 2014

Welcome!

NOVARS Research Centre in association with Open-Circuit, Salford and Basic Electricity Berlin are proud to present the first edition of the Sines and Squares Festival, celebrating the recent resurgence of analogue and modular synthesizers.

Part festival and part symposium, this event is one of UK's first festivals and concert series bringing together composers, performers, manufacturers, musicologists and DIY enthusiasts in a weekend of concerts, interactive sessions, installations, master classes, demonstrations and workshops.

Guests include Rob Hordijk of Hordijk Modular (Netherlands) and Tom Bugs of Bugbrand, two of the most creative designers of today's new breed of analogue sound, along with artists such as John Chantler (ROOM40, Café OTO), Lu Katavist (smalldeath), Richard Scott (psi, Basic Electricity), Buchla-master Dan_P and David Ross (ini.itu records).
We are also proud to host an extraordinary line-up of over 40 artists from the UK, Mexico, Spain, France, USA, Germany, Netherlands, Slovak Republic, Mexico, Italy and Brazil. These include Tintin Patrone, Nils Knott, Daniel van Eendenburg and the Krachkisten Orchestra, Melanie O'Dubhshlaine, Rosalia Soria, Dennis Verschoor, Sam Weaver, Finlay Shakespeare, Danny Saul, Jo Hyde, Aidan Taylor, Kim Da Costa, Jens Hedman, Lu Katavist, Richard Scott, Jules Rawlinson, Ricardo Climent, Mark Pilkington, Dave Ross, Patrick Gunawan Hartono, Guillaume Dujat des Allimes, Tom Onky Willson, Epameinodas Fassianos, Ignacio Pecino, Chelsea Bruno, Manoli Moriaty, Mat Dalgleish, Chris Foster, Gary Bromham, Andrew Lowe and James Prosser, Matt Preston, Dave O Mahony, Jim Frize, Andrew Duff, James Parr, Alexander Harden, Nuria Bonet, Alex Gowan-Webster, Alena Mesarosova, Manuel Ferrer, Rodrigo de León Garza, John Macedo, Caterina Barbieri.

The festival features artists working with systems such as Buchla 200, Haken Continuum, Eurorack, Bugbrand, EMS Synthi, Expert Sleepers, Ciat Lonbarde and Serge, and there will be space to discuss the music, instruments, the scene and ideas behind the remarkable recent resurgence of these beguiling, once thought to be obsolete musical instruments.

We hope to deepen and enrich the culture currently surrounding analogue and modular musical technologies and to help build an artistic and discursive community that bridges boundaries between academic and non-academic electronic music, the technical and aesthetic, synthesizers designers and users, analogue and digital technologies, and the past and current artistic practice.

Sines & Squares Festival Team

Sines & Squares Festival
Analogue and Modular Synthesis
24-26th October 2014

Islington Mill, Salford and
The Martin Harris Centre,
The University of Manchester, UK.

sines-squares.org

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Sines & Squares Programme

EVENTS AT THE ISLINGTON MILL STUDIOS, Salford	
FRIDAY 24th October 2014	
20:30 h	**Opening Concert at the Islington Mill Club** Live Performances by John Chantler / Lu Katavist / Richard Scott
Ongoing 24-26 October	**Islington Mill Gallery - installation:** Tintin Patrone, Nils Knott, Daniel van Eendenburg and the Krachkisten Orchestra
SUNDAY 26th October 2014	
11:00 -15:00 h	Tom Bugs of Bugbrand WORKSHOP (II)
14:00 -17:00 h	Sines & Squares Modular Lounge
17.00 - 17.30 h	Patchbay Session by Finlay Shakespeare (Yoga Room)
17:30 -19:15 h	Masterclass by Rob Hordijk (Yoga Room)
19:30 -20:00 h	Islington Mill Gallery Performance by Krachkisten Orchestra with Tintin Patrone, Nils Knott and Daniel van Eendenburg
20.00 h	Raffle Draw (analogue kits, music and more) -
20.05 h	Evening CLOSING CONCERT, Islington Mill Club Manoli Moriaty / Melanie O'Dubhshlaine/ Dan_P. (Buchla 200 modular system)

EVENTS AT THE MARTIN HARRIS CENTRE FOR MUSIC AND DRAMA

SATURDAY 25th October 2014	
13.30 - 17.00 h	Tom Bugs of Bugbrand WORKSHOP (I) Place: Room F20 (Martin Harris Centre) - First floor, Drama side.
From 12 noon	Foyer Display and Interactive Installation Place: Martin Harris Centre Foyer Manusamo&Bzika - Augmented Reality (based on 'Putney') - Oculus Rift2 and Augmented Reality by Alena Mesarosova and Manuel Ferrer. Harry Plotter: Dennis Verschoor (The Netherlands), aka Harry Plotter: Drawing images with an analogue (modular) synthesizer signal.
12.00 -17.00 h	Patchbay Session (papers) with Musical Interludes Place: Room G16 (Martin Harris Centre) - Ground Floor Mat Dalgleish, Chris Foster, Gary Bromham, Andrew Lowe and James Prosser / Matt Preston / Dave O Mahony / Dave O Mahony/ Jim Frize (sonodrome) / Andrew Duff / James Parr / Alexander Harden / Nuria Bonet / Rodrigo de León Garza / Mat Dalgleish and Matt Bellingham / Alex Gowan-Webster.
18.00 - 19.00 h	CONCERT ONE (Thaw) Place: John Thaw Studio Theatre (Martin Harris Centre) Sam Weaver and Danny Saul / Caterina Barbieri / John Macedo /Robert Ratcliffe / Jo Hyde.
19.30 - 20.40 h	CONCERT TWO (Thaw) Place: John Thaw Studio Theatre (Martin Harris Centre) Aidan Taylor and Kim Da Costa / Jens Hedman /Jules Rawlinson / Ricardo Climent and Mark Pilkington / Dave Ross/ Patrick Gunawan Hartono.
SUNDAY 26th October 2014	
9.00-10.30 (non-public event)	MANTIS Diffusion System Workshop. Run by NOVARS Postgraduates Place: John Thaw Studio Theatre (Martin Harris Centre) Open Workshop for Manchester Music Students and Festival Participants only.
14.00 - 15.00 h	CONCERT THREE (Thaw) Place: John Thaw Studio Theatre (Martin Harris Centre) Rosalia Soria / Guillaume Dujat des Allimes and Tom Onky Willson/ Mark Pilkington / Epameinodas Fassianos / Ignacio Pecino/ Chelsea Bruno.
15.30 h (participants only)	Meeting point (Martin Harris Centre Foyer) to go to the Sines & Squares Modular Lounge at Salford University. Instructions on the Welcome Pack.

PROGRAMME NOTES AND BIOGRAPHIES

EVENTS AT THE ISLINGTON MILL STUDIOS, Salford

FRIDAY 24th October 2014

20:30 h	**Opening Concert at the Islington Mill Club** Live Performances by John Chantler / Lu Katavist / Richard Scott

For the opening night of Sines & Squares... Open-Circuit & Novars Research Centre present an evening of live electronic music from three diverse artists currently exploring the modular synthesiser as their main performance tool.

John Chantler

John Chantler (ROOM40) works primarily with modular synthesizer systems and has presented his work in USA, Canada, Australia, New Zealand, Japan and across Europe. His own take on generative minimalism and surface stasis can be heard in his 'Automatic Music' series as well as his latest release 'Even Clean Hands Damage The Work'. "A highly synthetic, highly textural, yet deeply melodic work of experimental electronics that seemingly crosses the divide between nature and electricity." John works as a producer at London's Cafe OTO and is responsible for programming the venue's internationally renowned concerts.

Lu Katavist

Cologne-based Lu Katavist (Smalldeath) focuses on improvised live-electronics, controlling a modular system with the Haken Continuum Fingerboard. His music ranges from tonal drones to twitchy noise bursts, with sounds drifting between ethereal pads, piercing distortion, chirping delay and rumbling bass. Overall, it makes for a calm, if not meditative listening experience. His work can be heard on his 'Retoxis' LP

Richard Scott

He is an electroacoustic composer and free-improvisation musician working with analogue modular synthesizers and alternative controllers such as the Buchla Thunder and Buchla Lightning, his own self-designed WiGi infra-red controller developed at STEIM. He has been composing and performing improvised music for over 25 years, recently collaborating with artists such as Evan Parker, Jon Rose, Richard Barrett, Thomas Lehn, Twinkle3, Axel Dörner, Michael Vorfeld, Helmut Lemke, Ute Wasserman, David Birchall, Emilio Gordoa, and Grutronic.

FRIDAY 24th October 2014 - Islington Mill Gallery

Ongoing 24-26 October	Installation: Tintin Patrone, Nils Knott, Daniel van Eendenburg and the Krachkisten Orchestra

FLUKTUATION 8... FEATURING THE KRACHKISTEN ORCHESTRA

On display throughout the Sines-Squares festival at the Islington Mill (24-26 October), Tintin Patrone, Nils Knott and Daniel van Eendenburg present "Fluktuation 8", an installation about architecture and experimental music that explores the creative evolution of basic living elements. Music, stage and associated rituals are examined in less obvious ways and sometimes may even seem absurdly self-evident and banal. By using themes such as cultural traditions, pre-modern sound devices and general hedonism, Fluktuation 8 is an installation upon which thoughts that have apparently just been developed are manifested: Heute denken - Morgen fertig notes are made and then crossed out again, mistakes intend to be repeated. A performance by the Krackisten Orchestra will take place on Sunday at 19:30 during an open-day of workshops, presentations and performances.

PROGRAMME NOTES AND BIOGRAPHIES

EVENTS AT THE MARTIN HARRIS CENTRE FOR MUSIC AND DRAMA

SATURDAY 25th October 2014

13.30 - 17.00 h	Tom Bugs of Bugbrand WORKSHOP (I) Place: **Room F20** (Martin Harris Centre) - First floor, drama side.

Tom Bugs is a synthesizer designer/musician/sound artist who under the name of Bugbrand has manufactured many highly original analogue electronic devices in the past 20 years. These include the circuit-bent-by-design audioweevil series, and his rare and revered Bugbrand modular systems. For this festival he will present a new workshop design and attendees will have the chance to attend one of two workshops where they will be able to learn how to build one of his analogue designs – the Bugcrusher - from scratch. http:// www.bugbrand.co.uk
Workshop Details: http://bit.ly/1tW4VBm

FOYER MARTIN HARRIS CENTRE	
From 12 noon	Foyer Display and Interactive Installation Place: Martin Harris Centre Foyer **Manusamo&Bzika** - Augmented Reality (based on 'Putney') - Oculus Rift2 and Augmented Reality by Alena Mesarosova and Manuel Ferrer Harry Plotter

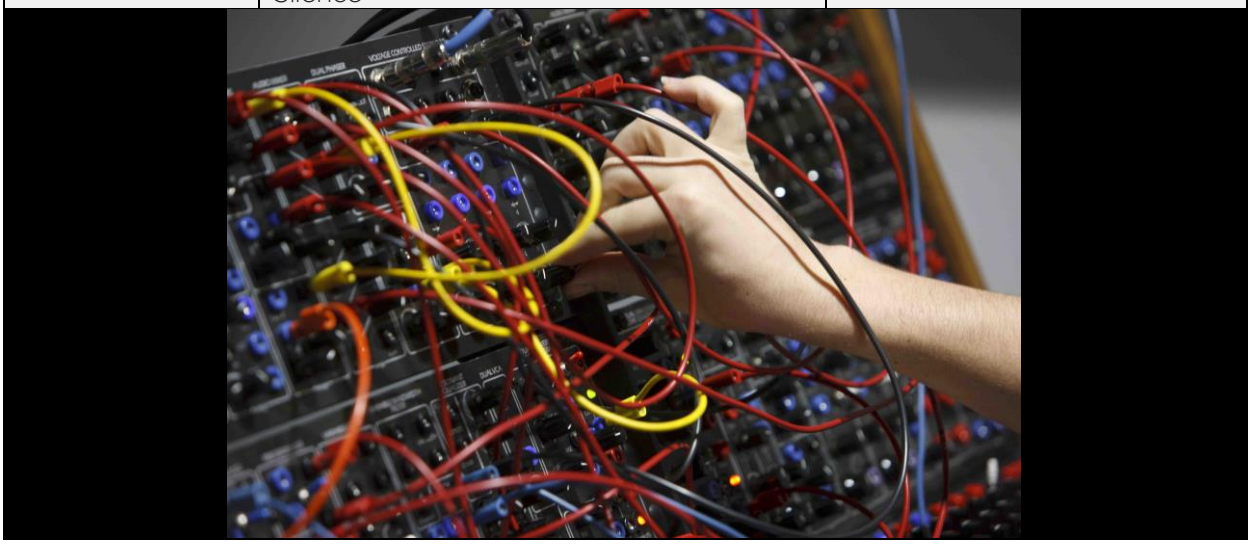
Manusamo & Bzika are an interdisciplinary group created by Manuel Ferrer Hernandéz (visual artist) y Alena Mesarosova (architect). The group focuses on the creation of interactive installations that involve the use of Augmented Reality (AR) and 3D modelling. Started in 2006, the group has produced AR creative work for numerous festivals and projects in Slovakia, Italy, Spain and Portugal. Manuel Ferrer holds a Fine Arts degree by Miguel Hernández University (Alicante) and a Master in Fine Arts by the Polytechnic University of Valencia where he is currently pursuing a PhD. He has lectured at San Gregorio de Portoviejo University, Manabí. (Ecuador). Alena holds a Bachelor and Engineer-Architecture degree in (Inzinier architekt) from the Fakulta Umení, Technická Univerzita v Košiciach, Eslovaquia. She also graduated from the Curso del bienio especialistico de scenografia en la Accademia di Belli Arti Catania ,Sicilia-Italia and is currently completing PhD at the Polytechnic University of Valencia.

Harry Plotter
Dennis Verschoor (The Netherlands), aka Harry Plotter, will be demonstrating how to draw real-time images with a plotter and analogue (modular) synthesizer.
Harry Plotter is a Rotterdam-based artist Mono-Poly. In this setup he will not be making music but using an old x-y plotter to create images. These images are created by the control voltages coming out of his patches and are controlling the X and Y axis on the plotter. Expect images like Spirograph like and blazing tornados and much more.

Welcome Pack
Festival participants can retrieve their welcome pack from the Foyer

SATURDAY 25th October 2014 PATCHBAY SESSIONS	
12.00 -17.00 h	**Patchbay Session (papers) with Musical Interludes** Place: Room G16 (Martin Harris Centre) - Ground Floor Limited seats

TIME	Patchbay session / Musical interlude	Author
12.00 h- 12.30 h	Patchbay: Ghosts of the modular	Matt Bellingham and Mat Dalgleish Prosser
12.30 h -13.00 h	Patchbay: Eurorack Modular Synth: Makenoise's "Maths"	Matt Preston
13.00 h -13.10 h	Musical Interlude: Title: Swain Despondent	Dave O Mahony
13.15 h -13.45 h	Patchbay: Discussion and demonstration on the topic of Analogue Dub Sirens	Jim Frize (sonodrome)
14.15 h - 14.25 h	Musical Interlude: Eurorack synth improvisation	James Parr
14.30 h -15.00 h	Patchbay: Music Technology and the Independence of Musical Sound	Alexander Harden
15.00 h - 15.30 h	Patchbay: Narratives in Latin American ElectroAcoustic Music: Does a Latin American EA Music exist?	Nuria Bonet
15.30 h - 15.40 h	Musical Interlude: Title: On Rain	Rodrigo de León Garza
15.45 h - 16.15 h	Patchbay: The synthesizer divided: the effect and prospects of the keyboard.	Mat Dalgleish, Chris Foster, Gary Bromham, Andrew Lowe and James
16.45 h - 16. 55 h	Musical Interlude: Title: The Great White Silence	Alex Gowan-Webster



Patchbay: Ghosts of the modular
By Matt Bellingham and Mat Dalgleish Prosser

Abstract
This presentation discusses the influence of modular synthesis on contemporary music computer and the field of Music Technology. Over the last two decades the computer has not only become ubiquitous but an all-in-one solution for the composition, production, distribution and performance of music. The recent revival of dedicated hardware synthesizers and the rise of the Eurorack modular format have been variously interpreted as nostalgia for past sounds, a punkish reaction against the sterility of mainstream digital tools, and a human desire for tactility in an ocean of simulacra. If it is tempting to position the modular synthesizer in opposition to the computer, this paper argues that the relationship is much more complex. In particular, it argues that the spectre of the modular synthesizer looms large over the contemporary musical computer. For instance, the Max family of visual programming languages adopts the metaphor of connecting computational objects together with virtual patchcords. These patchcords not only delineate how data flows between objects but also provide an intuitive visual representation of these flows. Thus, this modular-inspired paradigm is often considered more accessible than conventional text-based programming languages. The same patching metaphor is also found in other software, from Reaktor and Reason to Noatikl and Mixtikl. We identify and discuss the prospects but also the problems of applying the patching paradigm to the digital domain. Particular attention is paid to the role of skeuomorphic design and metaphor (both schematic and photo-realistic) in the learning process; the implied use of the mix window in Pro Tools, for instance, and the likelihood that contemporary new users do not have the background to make analogous links. Finally, we discuss the function of the patching metaphor as a type of lingua franca that has enabled crossover into new domains, particularly video game sound and interactive media.

Dr Mat Dalgleish
Born near Birmingham, UK, Mat studied fine art at the University of Northumbria and interactive media with former Stockhausen ensemble member and composer Rolf Gehlhaar at Coventry University. Since 2007 Mat has taught in HE, specialising in audio programming, music for film and music interaction, and is currently a Senior Lecturer in Music Technology at the University of Wolverhampton. His research interests are based around the intersection of interaction design and music technologies. This includes the design of new instruments, interfaces and sound installations, and interfaces that explore new ways to learn more traditional musical skills. Mat's PhD considered how the live electronics of David Tudor can inform the design of digital musical instruments. In 2009-11 he was a visiting researcher at The Open University's Music Computing Lab. In 2013 Mat exhibited audiovisual work at Beton7 gallery, Athens, and co-authored two chapters in the book Music and Human-Computer Interaction, published by Springer. Beyond academia, he has created interactive sound and audiovisual works for clients in the UK and Europe. In his spare time he designs Eurorack synthesizer modules that fuse Soviet-era designs and contemporary DSP.

Matt Bellingham
Matt Bellingham is a Senior Lecturer in Music Technology and Course Leader for the undergraduate Music Technology course at the University of Wolverhampton. He has been a lecturer on HE Music Technology and Production courses since 1999, specialising in acoustics, engineering, production and synthesis. Mat previously managed a large music department in the FE sector. He has also worked as an engineer and producer since 1996, of recordings for both major and independent labels. As a guitarist he has signed recording and publishing contracts, and has toured the UK and northern Europe. He is currently undertaking a PhD in the area of user interface design for the democratisation of end-user algorithmic software at the Open University's Music Computing Lab.

Patchbay: Eurorack Modular Synth: Makenoise's "Maths"
By Matt Preston

Abstract
This patch bay presentation is based on a modern classic of synthesis – a module which is almost certainly the Eurorack modular synth scene's most popular choice: Makenoise's "Maths". Of the three main modular synth formats – Frac, 5u and Eurorack – it is the latter that has really captured peoples' imagination, enjoying an exponential growth in popularity in recent years. In the mid-nineties there were only three main manufacturers within the Eurorack scene: Doepfer - the originators of the format - along with Analogue Systems and Analogue Solutions. Between 2000 and the present day this has grown to around 140 companies, churning out new designs almost weekly, and which range from brain interfaces to oscillators made from oscillating fans. The two most popular companies to emerge from this recent growth spurt are Vancouver's Intellijel and Makenoise, based in North Carolina. The latter have designed a module that has gained almost mythical status in the world of Eurorack – "Maths". If you were to post a thread online, asking for assistance with putting together your first system, it is inconceivable that Maths would not be suggested within the first page of replies. This is so prevalent that it has become somewhat of a standing joke. This leads us to the question: Why is this, and what makes Maths so special?
This question is to be addressed during the talk, along with other pertinent areas including: an explanation of the main functions of the module itself; the inspiration behind the design, both from an electronic and aesthetic standpoint; an outline of the broad philosophy of the module's designer. The presentation is sourced from a combination of historical and contemporary research, Matttech's first-hand experience, and an exclusive interview with Maths' designer, Tony Rolando of Makenoise. A questionnaire will be distributed among the attendees.

Matt Preston
Matt "matttech" Preston is a musician and producer from Manchester, who currently composes experimental electronic music under the name "Spite Zoo" (https://soundcloud.com/spitezoo-experimental-lab). He also specializes in the field of Eurorack Modular Synthesis, working on a large 21u multi-case system, alongside semi-modular offerings from Cwejman and Vermona. After heading to the North West in order to enroll on Salford University's Popular Music and Sound Recording Matt pursued a career in the music industry, securing deals with PWL (Pete Waterman Limited), Warner Brothers subsidiary Coalition Records, and culminating in commercial releases for Robert Miles' S:Alt Records as Blue Light Fever. The album and accompanying singles enjoyed some glowing reviews, much positive DJ feedback, and national radio airplay. However, in order to recharge his batteries, Matt eventually took a sabbatical from the industry and retrained as a teacher, specializing in Music Technology – and in particular, Synthesis. After a few years the pull of music making became too much, and a comprehensive Mac-based studio was put together, with a view to reigniting the creative process. Initially all work was undertaken using software. However, frustrated with being permanently tied to a mouse, and spurred on by some challenging life events, a new outlook persuaded Matt to venture into the world of modular synthesis. It has been an absolute revelation and he has not looked back since. Recently, largely as a result of Matt's raised profile as "matttech" on the Muff Wiggler modular synth forum, he has been commissioned to produce demos of modules from companies such as Synthetic Sound Labs (SSL), WMD Devices, Frequency Central and Intellijel - sometimes also contributing design ideas and undertaking beta-testing.

Musical Interlude: Title: Swain Despondent
By Dave O Mahony

Programme note

Swain Despondent is a critical look at relationship communication in the twenty-first century. It is an examination of the closeness between two people and the information exchange therein as being drowned-out by pervasive technology. When a relationship begins or ends, there are many moments of silent connection where words are not used. This shared experience is more poignant as a relationship draws to an end, when there is nothing left to say but still the conversation continues to run in your head. Swain Despondent is that internal (shared) conversation but it is surrounded by environmental interruptions. How can one have a clear picture of how they want the last conversation to go, or indeed clearly decode that conversation when they are being sonically assaulted by the very place they decided to meet?

Dave O Mahony

Dave O Mahony is an electronic music composer from Limerick, Ireland. He obtained an honours degrees in English & New Media and a Masters in Music Technology, both from the University of Limerick where he is currently pursuing a PhD in Music Technology. A brief outline of Dave's research can be found at: http://www.dmarc.ie/people/phd-students/david-o-mahoney
He is currently composing using an Interaxon Muse brain sensing headband sending control voltage to a Eurorack modular synthesizer and also uses the iPad as a composition tool.

Patchbay: Discussion and demonstration on the topic of Analogue Dub Sirens
by Jim Frize (sonodrome)

Abstract

What is a Dub Siren? Who invented them? What is the future of Dub Sirens?... Dub Sirens are electronic sound circuits that were born out of the experimental studio practices of the 1970s recording studios in Jamaica. The topic of Analogue Dub Sirens is under-documented, much of the history of these esoteric musical instruments is shrouded in mystery. An integral part of the Dub Reggae sound, Dub Sirens have gone on to be used in a range of different popular musical styles including; Ragga, Dancehall, Drum and Bass, Hip Hop and Dubstep. In this discussion we will talk about some of the early innovators of Dub music, such as Osbourne "King Tubby" Ruddock and Lee "Scratch" Perry, showing how their influence contributed to the rise of the standalone analogue Dub Siren. By touching upon the sociopolitical backdrop that Dub Reggae was born from, we will posit why the Dub Siren came into being and what the sound of this instrument represents within Dub music. We will discuss some of the archetypical Dub Sirens such as the NJD SE1 and the Lickshot, listening to how they are used in various music productions and talking about their function as a live performance tool for sound systems, such as the UK based Jah Shaka Sound System. We will also look into why the Dub Siren is so shrouded in mystery and why information on their design is often scarce and fiercely protected. Lastly we will take a look at some modern Dub Sirens, including a live demonstration of my own Dub Siren designs, talking about the future of these devices and how they have changed, or not changed, over the years. This discussion will be accompanied by a host of listening material presented to you on a miniature reggae sound system.

Jim Frize

Jim Frize was born in the north east of England near the banks of the River Tyne. From a very early age Jim was blessed with a curiosity for pulling apart electronics, putting jam sandwiches in VCRs and smashing up TVs with a hammer. As a musician and engineer Jim has designed and built various

synthesizers and kits over the past eight years. He was introduced to building electronic musical instruments as an undergraduate at De Montfort University, where he joined Dr John Richard's Dirty Electronics Ensemble in 2006 and learnt the art of hardware hacking and circuit bending. After graduating with a BA Hons Music, Technology and Innovation degree in 2009, Jim became a fellow at the Institute of Digital Innovation where he and his partner, Kat Pattison, set up the creative technology company Sonodrome Ltd. Sonodrome has provided technology workshops for the likes of SEAT, TOPPS Inc, the Thinking Digital Conference, Teen Tech, VISTA, Embrace Arts as well as a number of charities and councils providing access to technology. More recently Jim has worked in collaboration with the Dirty Electronics building a Synth Sequencer for Richard James (Aphex Twin) and designing the 20th anniversary Sónar synthesizer for the Sónar music festival. Currently Jim is a PhD candidate and part-time lecturer at De Montfort University where he teaches Max MSP and researches deconstruction, music technology and the blurry line between artists and engineers.

Musical Interlude: Eurorack synth improvisation
by James Parr

Notes on the improvisation

James Parr will perform using a Eurorack synth/ drummachine. The system involves basic synthesis of sine waves and two drum sounds, a bass drum and woodblock sound. Materials are sampled, looped and layered to abstract the sounds in a organic way, using a Eurorack sampler module, grungy LoFi quality, but evocative of life, away from computers and arguably more natural, although somewhat post-apocalyptic, in feel. The performer aims to disrupt simple sine waves with irregular beats and short sound cells, like breaking waves on a rocky shore line.

James Parr

James Parr studied Fine Art at Camberwell and St Martins in London. He started making electronic music around 1998 using Max/Msp and a little hardware, i.e. digital synth and became involved with the Adaadat record label in east London 2000. Used the name greypetcat to make visuals for many other music artists using Max/Msp/Nato 0+55, and worked producing electronic music under the name 1ntr. Worked for Apple as a day job, fixing computers. 2010 started to become more interested in analogue synthesis and started to build a small modular eurorack synth. In 2014 released the album 'Corrupt Practices' for the Adaadat record label: http://www.adaadat.co.uk/1ntr/. This album was produced using a small eurorack modular synth and a Teenage Engineering OP-1. Mostly abstract and slightly industrial-sounding, with some rhythmic elements, it was intended to evoke an alternative to his robotic working life, more organic and less sterile. In 2014, he added a sequencer and a couple of drum modules to his modular synth to make it more self-contained, without the need for external gear. Recently started to get back into Max/Msp/Jitter, but his main interest is in the analogue synthesis and control of my small modular.

Patchbay: Music Technology and the Independence of Musical Sound
by Alexander Harden

Abstract
In recent decades, advances in electronic music technology have afforded previously- unprecedented variety of sonic design whilst transforming approaches to consumption and realisation of music. Indeed, the rise in the use of synthesisers and associated equipment has introduced profound creative possibilities, despite the initially cold reception Dr Robert Moog recalls (Fjellestad 2004). Despite being among the most ubiquitous musical inventions heard in recent popular music and offering remarkable timbral versatility, the synthesiser's acousmatic disassociation between sound and source remains under-addressed by hermeneutic musicological strategies. From the popularity of the player-piano to the later introduction of ampliVication and sound capture technologies, this paper traces several broad developments, impacting one's interaction with musical sound. These developments have facilitated its successive fredom from resonant bodies; performers, and the temporality and physicality of articulation: issues which all now accompany synthesisers and related devices. In particular, this paper examines how such advances relate to traditional listening practices and musical phenomenology. In the context of contemporary creative practice, this speaks to an ongoing debate of whether such areas require reevaluation.
Discussion will be encouraged and attendees from any background are encouraged to participate openly. Keywords: Creative Practice, Acousmatics, Hermeneutics

Alexander Harden
Alexander C. Harden is a British electronica composer and researcher in Popular Music Studies. Having recently pursued postgraduate studies in electroacoustic composition and sonic art at the University of Birmingham, his doctoral research moves tack to consider the hermeneutics of 21st century studio-based popular music, funded by the University of Surrey. His research interests include the creative application of studio technology and mimetic issues within studio-based creative practice. As a composer, Alexander's work explores the impact of digital musicianship upon creative practice. Select material is released under the Subsonic Winter musical project and his original works have also appeared at the London Southbank Centre (2012) with the support of Sound and Music, and the Festival de Cannes (2014).

Patchbay: Narratives in Latin American ElectroAcoustic Music: Does a Latin American ElectroAcoustic Music exist?
by Nuria Bonet

Abstract
'If an electronic synthesizer does not have a nationality, the person who handles it has' (Mario Lavista, 1977). The question of national and cultural identity of artistic production with analogue electronics is discussed in respect to the history of electroacoustic composition in Latin America. A little historic overview of the development of the genre will help to understand how the infrastructure or the lack thereof shaped the methods of early composers. The cost and lack of equipment both represent a difficulty and an opportunity for composers to express themselves and create their distinctive voice. The early musical output of Latin American composers is characterised by themes which run through a large part of the repertoire. The themes singled out in this paper are the themes of exile, passion for the medium and identity. These are reflected both in the history and in the repertoire of the genre. The paper discusses the possibilities for artists to express feelings of belonging to the larger Latin American community but also their individual countries through the medium of analogue electronics. Finally, the paper will discuss whether analogue electronics can actually give a cultural community voice distinct from the euro-centric discipline of electroacoustic music.

Núria Bonet

Núria Bonet (b.1991) is a composer currently based in Plymouth. She grew up in Luxembourg, where she attended the Conservatoire de la Ville de Luxembourg, studying piano, clarinet and harmony. She went on to study for a degree in music at the University of Manchester at the tender age of 17, followed by a Masters in Electroacoustic composition at the same institution. She has just finished a Masters in Acoustics and Music Technology at the University of Edinburgh, where she worked on harmonicity in natural horns and the Catalan folkloric instrument called tenora. She has recently begun a PhD in sonification with Eduardo Miranda at the University of Plymouth. Núria is particularly interested in the cross-disciplines of music, science and technology but also has a soft spot for visiting instrument museums across Europe in search of tenoras.

Musical Interlude: Title: .On Rain
by Rodrigo de León Garza

Notes on the improvisation

This piece is based on the audiovisual exploration when you are lost in large abandoned factories. With this piece I want to recreate the sonic environment of these places which were very hectic for 24/7 hours. The sound of these places has changed very dramatically and the echoes and the silence aim to represent the change of production and in the workers' lives, all destroyed and forgotten.
I employ modular and analogue synthesizers because when I work with this equipment, I feel I can bring these memories back, in the same way I bring back the sounds of the old factories.

Rodrigo de León Garza

Monterrey, Mexico. Rodrigo de León Garza is interested in sound composition based on electronic media (modular synthesizer, analog synthesizer, magnetic tapes, analog effects) and unconventional means. He currently lives in Mexico City and is attending SAE, coursing the last year of the Sound engineer degree. When not at school, he work as an editor and producer for video dubbing and is responsible for the sound identity and part of the audiovisual team at the Center for Digital Culture in Mexico City. #FFFF is an audiovisual collective that León Garza co-founded in 2011. #FFFF's work is based on multimedia and interactive performances. The aim of this project because was to experiment with the technological and methodological elements that music, dance, visual arts and design provide. His solo live performances are based on improvisations, however, there is an structure behind all the work and the sound. Before playing live, he write my own scores, that are based on narrative (despite not having a musical theory background). While working with analog media, Rodrigo has collaborated and participated in events and venues such as: Laboratorio Arte Alameda (LAA), Quorum (Bellas Artes), Centro multimedia (Centro Nacional de las Artes), Live Performers Meeting (LPM), Festival Ceremonia, Volta, Source 2.0, White Noise Festival (Guanajuato), Underground006 (Guadalajara) and Visiones Sonoras Nocturnas (CMMAS).

Patchbay: The synthesizer divided: the effect and prospects of the keyboard
by Mat Dalgleish, Chris Foster, Gary Bromham, Andrew Lowe and James

Abstract

The earliest instruments to involve electricity date back to the 18th century, but the development of electronic instruments did not begin in earnest until the dawn of the 20th century. However, if these early years featured rapid advances in both sound generation and performance interface, the decade before WWII saw a return to the keyboard. Following the Post War rise of electric music studio, the 1960s saw the development of the modular synthesizer, most notably by Moog and Buchla. The Moog modular was aimed at professional musicians and keyboard players in particular, and thus offered a conventional keyboard as its primary means of control. By contrast, the Buchla 100 series Modular Electronic Music System was not intended to be an instrument in the traditional sense, but rather a kind of experimental sound laboratory. Instead of a conventional keyboard, it offered more open-ended touch plates. Subsequent commercial success pushed not only the Moog brand, but also its vision of synthesis, into the mainstream. The relationship between keyboard and synthesizer was only further reinforced with the advent of MIDI. Although the NIME community has since proposed a multitude of new interfaces, the keyboard remains ubiquitous today. After setting the historical context, this paper considers how the keyboard interface has shaped the both the synthesizer and music more broadly. We contend that the dominance of the keyboard has not only emphasised real-time performance, but, by focusing on real-time, note-level control at the expense of larger-scale manipulation, also restricted exploration of the instrument's compositional possibilities. Finally, with reference to ideas of innovation by Cage (1937) and Johnson (2010), we speculate as to why the keyboard has endured, and discuss its future prospects.

The synthesizer divided - Biographies

Dr. Mat Dalgleish

Read bio above (Patchbay: Ghosts of the modular)

Gary Bromham

Gary Bromham is a producer and songwriter who began his career in Iceland. After co-producing a Eurovision entry, making an album with jazz-funk band Mezzoforte and working with Bjork, he subsequently worked with Andrew Ridgeley and George Michael. In 1990 he signed a publishing deal with Warner Chappell Music, and went on to write for artists such as Sheryl Crow and Bow Wow Wow. In the late 1990s he had hits with Lonyo's Summer of Love, Dannii Minogue's Who Do You Love Now and with Sheryl Crowe's Soak up the Sun. More recently he has collaborated with Pam Sheyne on writing/production projects for the likes of Delta Goodrem, Lemar, Tina Arena and Lisa Scott-Lee. He has also been selected by Apple to be one of three Apple Distinguished Professionals (ADPs) in the UK, guest lectured at several universities, advised on academic programmes, and successfully supervised a PhD candidate in Norway.

Andrew Lowe

Andrew has been involved in music technology since an early age, and has an undergraduate degree in Audio and Music Technology from Anglia Ruskin University and an MA in Music Technology at the University of Wolverhampton. Since 2000 he has worked at the University of Wolverhampton as part of the Performing Arts Technical Team, where he is responsible for the running and maintenance of the Music Department's equipment, studios and computer labs. He also acts as a visiting lecturer when time allows, and supervises music production based dissertation work.

Dr. Chris Foster

Dr. Chris Foster is a Lecturer in the Music Department in the Faculty of Arts at the University of Wolverhampton. His research interests are in composition, and he has studied with a variety of composers over the years, including Richard Steinitz, John Casken and, more recently, Michael Finnissy.

(continues)

James Prosser

James Prosser specialises in studio production and sound for film. Since 2012 he has worked at a recording studio in Florence, Italy, undertaking a variety of production, multimedia and live sound projects. James has also taught on the undergraduate Music Technology course at the University of Wolverhampton as a visiting lecturer and at City of Wolverhampton College. He is currently undertaking postgraduate study.

Musical Interlude: Title: The Great White Silence
by Alex Gowan-Webster

Notes

The Great White Silence is a scoring to an extract of the 1924 film of the same name. The piece was written in early 2014 and is one of the first pieces to use my eurorack setup. I was keen to explore the full range of sounds I could glean from the synthesizer as opposed to its regular melodic and rhythm based sounds. As a result of this approach the piece generates a simplistic but effective sound world that demonstrates the alien nature of the Antarctic landscape.

Alex Gowan-Webster

Alex Gowan-Webster is a composer based at the University of Sheffield with a dual interest in both electroacoustic and instrumental composition. He also has further interests in the use of music technology in generating composition material both as source sounds and for scores including the construction of compositional tools in software environments such as Puredata. He is a modular synthesizer enthusiast maintaining a small Eurorack system, which is often used as a source sound for his electroacoustic compositions.

SATURDAY 25th October 2014 The Martin Harris Centre for Music and Drama	
18.00 - 19.00 h	CONCERT ONE (Thaw) Place: John Thaw Studio Theatre (Martin Harris Centre) Sam Weaver and Danny Saul / Caterina Barbieri / John Macedo /Robert Ratcliffe / Jo Hyde

" A Diet of Thistles" -Live Improvisation & Diffusion (Hordijk synth + computer)	Sam Weaver and Danny Saul
"Undular"	Caterina Barbieri. 8 channels surround
"Improvisation for Coupled Modular Synth & Computer"	John Macedo
"Phoenix"	Robert Ratcliffe
"Improvisation with Eurorack in 8 channels"	Jo Hyde

"Live Improvisation & Diffusion (Hordijk synth + computer)"
Sam Weaver and Danny Saul

Sam and Danny first collaborated at the 2014 Fat Out Festival (Islington Mill), in a shape-shifting semi-improvised live performance that combined their respective practices of modular synthesis and laptop performance. They found a mutual connection through shared interests including extracting / refining detail in sound, their varied approaches to synthesis and also performance. For Sines & Squares they perform *A Diet of Thistles*, a new piece exploring behaviour and space through modular sound. Sam will generate live synthesized output based on his extensive patching experiments. The sound materials have been selected through discussions the pair had focusing on notions of behaviour; activity / inactivity, stability / instability, convergence / divergence, etc. Danny will interpret the sound through space via the MANTIS diffusion system.

Biographies

Sam Weaver one half of London outfit Hungryghost, is a sound engineer, electronic musician and improviser working predominantly with modular analog devices. He has recently recorded and performed with Charles Hayward, Gnod and performed alongside Kevin Drumm.
With his knowledge of building synthesizers Sam has recently formed Open-Circuit a new Manchester based project exploring the field of circuit bending and musical electronics with the aim of bringing together an ever growing community of makers, hackers, artists & engineers who have a DIY mindset towards technology, creating an open network and body of knowledge through education and public events, such as workshops and concerts.
http://opencircuit-network.tumblr.com/
Danny Saul is an electroacoustic composer from Manchester, UK. His interests are acousmatic composition, space, sound diffusion, and live electronics. His work has included collaborations, performances and recordings with notable contemporary experimental musicians including Ben Frost, Machinefabriek, Greg Haines, Jasper TX, Xela and Simon Scott. Danny has played throughout the UK, Europe, U.S.A and Japan. He has to date released two solo albums, Harsh, Final. (White Box, 2009), and Kinison – Goldthwait (Hibernate Recordings, 2010). He is currently pursuing a PhD under the supervision of Professor David Berezan at the NOVARS Research Centre for Electroacoustic Composition, University of Manchester.

"Undular"
by Caterina Barbieri. Fixed Media. 8 channels surround

Note

Undular is an eight-channel piece composed by Caterina Barbieri in 2013. All sounds derive from a Buchla Modular System with almost no digital processing.
The composition originates from a meditative approach to primary waveforms and polyrhythm of harmonics, stretching the boundaries between drone, minimalism and techno.
The idea behind Undular was to inherit and develop certain implications of minimalism and techno, in particular exploring the power of psychomotor induction that they have in common. In this regard, the composition conjugates features of 'danceable' music with a texture-based compositional attitude, both developed in an immersive and three-dimensional listening environment. The "dance appeal" of this compositional perspective simply arises from a meditation on the anatomy of waveforms in modulars. All made possible and interesting by the Buchla modular system, supplying deep and rich sounds, as well as the unique ability to finely sculpt aural spaces. Besides generating an immense variety of complex and rich sounds not existing in nature, synthesis gives us the possibility to shape the spectrum on a microscopic level and have an infinitesimal control on acoustic and psychoacoustic effects, further developing our ability to perceive vertical relationships inside a sound spectrum (such as the mixture and the proportions between the harmonics, the aural beats etc).

Immersive listening experiences with multichannel systems greatly advance our cognitive and auditory comprehension of music. After a certain exposure to the sounds, the spectral spaces underlying the fundamental tones, at first almost 'invisible', come to our consciousness, enlightening an hidden perceptive dimension, that may not be specified in a score but still exists in the mind and in the body of the listener. Such a listening process may enlighten the listener to live the music as an infinitely changing experience (not only as a form), where she/he takes an active position, even a performative role. One can investigate the density of the harmonics and the secrets of their variations in time. One can move the skull horizontally and vertically to evaluate how the perception of the spectrum varies in space; cranial movement offers alternative aural perceptions due to the filtering, phasing and reflection's phenomena depending on the angular incidence of the wavefronts on one's ears.

Undular draws inspiration from all of this in a very raw and stylized manner. With *Undular*, I wanted to crystallise the dancing of wave cycles in algid architectures of time and space. This was my starting point to build polyrhythmic and somehow polyphonic patterns, working on the stratification of different layers that I recorded on separate tracks after having prepared a patch on the Buchla Modular System.*Undular* was played and recorded live, mainly using modules such as the Complex Waveform Generator, the Programmable Spectral Processor, the Quad Lowpass Gate Model, a Control Voltage Sequencer and synthesis techniques such as the Ring Modulation, the Amplitude Modulation and the Frequency Modulation. Additionally, modular systems allow integrative compositional approaches resulting in an intelligent balance between chance and calculate organisation, acting as fascinating 'laboratories' for new musical aesthetics far away from the contradictions and the dilemmas of the digital environment. If the infinite possibilities of digital art distress the composer and stifle balance between chance and structurisation, the major limitations of the modular synthesis can instead develop new forms of coexistence between varying tactics of formal organisation in the musical process.
This may be one of the reasons behind the incredible renaissance of modular synthesizers in the last decade.

Caterina Barbieri

STIM: Swedish International Society of Composers Caterina Barbieri (b.1990, Bologna, Italy) is a composer and performer of electroacoustic music. Mostly interested in modular synthesis, three-dimensional spatialisation and psychoacoustic aural sculpture, her music arises from a meditative

approach to primary waveforms, microtonality and the polyrhythm of harmonics, on the boundary between drone, minimalism and techno in multichannel systems. Her minimalistic focus is rooted in the exploration of the stratigraphic potential of voltage-controlled synthesizers, in terms of polyrhythm and polyphony. Synthesis, texture-based forms and immersive listening are three fundamental conditions for her to enhance an advanced cognitive and auditory art, not based on extrinsic links but solely built on the experience of the spectrum, able to develop our very limited ability of perceiving the vertical domain of music, involving us in a holistic way. She holds a diploma in classical guitar and a bachelor's degree in electroacoustic music from the Conservatory of Bologna, Italy (plus an exchange programme at the Royal University of Music in Stockholm, Sweden) with a thesis on Ambisonics and the perception of time, space and sound spectrum in vertical music. She is currently finishing a bachelor's degree in the Faculty of Humanities and Philosophy of Bologna, with a thesis about psychoacoustics and modality in dhrupad music. She is active as audiovisual artist, acousmatic composer, guitarist and music teacher, living between Bologna and Stockholm. Her work has been commissioned and performed in festivals and venues of experimental music in Europe, such us Norbergfestival, Suona Francese, De Monfort University, Angelica, Stockholm Music and Arts, Sound Of Stockholm. Her debut album Vertical will be released on the american label Important Records/Cassauna in September 2014. The album, composed and produced in Stockholm at the Elektronmusikstudion (EMS), is entirely based on Buchla Modular Synthesizer sounds and vocals. Her slow wave solo project Morbida will be released in Autumn 2014 on the swedish label Oma333. She's also member of the neo psych wave quintet S.W.G, whose debut album will be released on the Italian label Trovarobato in winter 2014.

"Improvisation for Coupled Modular Synth & Computer"
by John Macedo

Note

For Coupled Modular Synthesizer & Computer is a live work that explores performance with an electronic sound source that is unstable and unpredictable. At the heart of the performance is an analogue modular synthesizer and a computer that are 'coupled', meaning that both discrete devices are sensitive to each other's behaviours. One's movement effects the other's and vice versa, creating an interdependency and a blurring of the lines between analogue and digital.
Presented as a 4 channel performance, it features three components: an analogue modular synthesizer, a Max/SuperCollider digital synthesis patch, and the performer. The sound from the modular synthesizer is fed into the Max/SuperCollider patch, which analyses the incoming audio and derives digitally-generated sound and control voltages based on the frequency and dynamic information. The computer-generated control voltages are then in turn sent back to the modular synthesizer modifying its behaviour further, creating a feedback loop between the analogue and digital domains. The resulting output is an uncanny and ambiguous hybrid of digital and analogue synthesis with intervention from the performer who becomes an active part of the system. In this case the performer is more like an observer who goes with the flow of what the system is creating from moment to moment, listening and guiding the sound/performance further into new unpredictable realms, unknown to the themselves and the audience.

John Macedo

John Macedo (b. 1983) is a sound artist from London. Over the past 10 years he has incorporated everything from acoustic instruments and environmental sound, to analogue and digital synthesis, into compositions, live performances and sound installations. He has a pluralistic approach which focuses on revealing and presenting the creative and musical potential in all sounds, objects and technologies.

Through the use of uncertainty, improvisation, self-generating systems, and audience interaction, he attempts to blur the lines between composer/performer/listener, and draw connections between apparently disparate and conflicting forms, practices, and conventions. His work is concerned with presenting sound as a tangible experience, often in intimate, immersive and intuitive ways. This encourages a deep participation and liveliness in the present moment and highlights the contingent and ephemeral nature of sound in space. John has a first class degree in Sonic Arts from Middlesex University and in 2013 completed a MMus in Studio Composition at Goldsmiths, University of London, receiving a Distinction. His academic work included writings, compositions and performances exploring spectral composition techniques, organic and self-generating systems, silence and sound in space, perception and expectation in music, and chaotic and nonlinear methods of digital and analogue synthesis. He is an active member of London's experimental electronic and improvised music communities and has performed solo and in collaboration with other musicians at Cafe OTO, ICA, Whitechapel Gallery, Kings Place, and Hundred Years Gallery, to name a few. In June 2013 he was artist-in-residence at WORM Studio in Rotterdam, where he worked with their extensive collection of vintage analogue synthesizers such as the ARP 2500 and 2600, a vintage Serge Modular System, the EMS VCS3 and more. He has published works on Sound Holes, Beartown Records, Eyes of Sound, and his own imprint, The Black Plume Editions.

"Phoenix"
by Robert Ratcliffe for Fixed Media

Note

Phoenix explores the possibility of combining characteristic features of synthetic-driven EDM genres such as acid house and techno (the tools of production, distortion, rhythmic and melodic patterns) with Stravinsky's "rhythmic cell" technique, and an approach to sound design that is characteristic of electroacoustic composition. Metrical and structural information from the Rite of Spring (1913) was used as a template for the organisation of musical material within Phoenix, whose default structure is an amalgamation of formal attributes (tempo indications, time signature changes, motivic relationships, entry and exit points for textural layers) taken from the last four movements of the source work. Original material contained within this outline was generated by sequencing various analogue synthesizers using a pattern-based hardware sequencer, with the converted audio subsequently processed using digital audio techniques to provide an aggressive and belligerent sound palette ranging from distorted analogue patterns to digital noise.

Robert Ratcliffe

Robert Ratcliffe is an internationally recognised composer, sonic artist, EDM musicologist and performer. He completed a PhD in composition and musicology funded by the Arts and Humanities Research Council at Keele University, UK. He has developed a hybrid musical language and compositional technique through the cross-fertilisation of art music and electronic dance music (EDM). His hybrid compositions have been performed and broadcast in over twenty-five countries worldwide, including presentations at international events such as ACMC, ICMC, L'espace du Son, NIME and Sonorities. Recordings of his music are available from CMMAS, Furthernoise, SONUS and Vox Novus, while his writing is published in eContact!, eOREMA, Dancecult, Sonic Ideas, and the proceedings of the International Computer Music Conference (ICMC 2011). www.robertratcliffe.com

"Improvisation with Eurorack in 8 channels"
by Jo Hyde

Performance note

Joseph Hyde will give a semi-improvised performance exploring the physicality of pure analogue tones arranged in harmonic ratios combined with multichannel spatialisation. The performance will use a newly-built Eurorack system which has been assembled with a very specific purpose in mind. It has eight oscillators, deliberately chosen to be different in sound and capabilities. These are a Make Noise DPO (2 oscillators), Malekko/Richter Oscillator and Anti-Oscillator, TipTop Audio Z3000, Intellijel Rubicon and bubblesound uLFO and VCOb. The synth is designed as an eight-channel instrument, and also as an analog/digital hybrid. Eight Signal chains based around the eight oscillators are routed directly to an eight-channel PA (via the 8-way loom seen in the image), and an additional 8 channels are available to and from a laptop via ADAT lightpipe cables and Expert Sleepers software and hardware, allowing multiple routings through digital processes using Max/MSP. An additional 8 channels of CV are provided by similar means, allowing everything from sequencing to low- frequency audio-rate control to be handled by the computer. This method is used in particular to calculate and employ pure harmonic intervals as opposed to even tempered 1V-per-octave chromaticism.

Jo Hyde

Joseph Hyde's background is as a musician and composer, working in various areas but in the late 90s - and a period working with BEAST in Birmingham - settling on electroacoustic music, with or without live instruments. Since then, his work has diversified: whilst music and sound remain at the core of his practice, collaboration has become a key concern, particularly in the field of dance. Here he works both as a composer and in a broader capacity working with video, interactive systems and telepresence. His solo work has also broadened in scope to incorporate these elements, and he has made a series of audiovisual 'visual music' works, as well as writing about work in this area and running the biennial Seeing Sound visual music symposium. Hyde also works as a lecturer/academic, as Professor or Music at Bath Spa University in the UK – as well as teaching on the BA Creative Music Technology, he runs the MMus in Creative Sound and Media Technology and supervises a number of PhD students. Recently he has renewed his interest in modular synthesis (early on his career he made heavy use of EMS Synthi AKS and Moog modular) and has spent the last year putting together the Eurorack system you hear here.

SATURDAY 25th October 2014 The Martin Harris Centre for Music and Drama	
19.30 - 20.40 h	CONCERT TWO (Thaw) Place: John Thaw Studio Theatre (Martin Harris Centre)

"Form Constants" – Live improvisation with a/v	Aidan Taylor / Kim Da Costa
"Invisible Colours" 5.0 Fixed media	Jens Hedman
"FMRL" - Fixed media	Jules Rawlinson
"Putney" - for live game-audio	Ricardo Climent (with invited VCS3 performer Mark Pilkington)
"Benjolin" . 8 channel Fixed media	Patrick Gunawan Hartono.
"Stochastic Moods"	Dave Ross

The Form Constants project
by Aidan Taylor / Kim Da Costa

Aidan Taylor / Kim Da Costa (and the Form Constants project)

Form Constants in a relatively new project set up as a playful outlet for Aidan and Kim's shared interest in electronics, installation and performance art. Their performance setup has mostly been constructed in their home workshop using a combination of original designs and kit projects. Their current work is made up by designing open-ended compositions based on chaos theory and chaotic systems described by Edward Lorenz in his book "The Essence of Chaos". Form Constants provided performances for "From Now On" festival in Cardiff and "Supernormal" festival in Oxfordshire amongst other events this year. Kim has a background in animation and design. In her work she uses homemade video synthesisers and obsolete, broken and unwanted video hardware to generate signals and video feedback. She is largely influenced by the video art of Nam June Paik in her work and is obsessive over 3D fractals! Aidan has been working with electronic instrument design for a number of years. Lacking any education in electronics he has learned largely through reverse engineering and the anti-thesis methods of Reed Ghazala and Nic Collins. His instrument design has always been geared towards performance but he also has an interest in generative and reactive music systems. He has played music in a number of solo and collaborative projects including DIY/Hack trio Ginko and Matthew Lovett's outdoor improvising collective Field Sports / Fold Music. Today Aidan is working with modular synthesiser systems in his design and musical work and also delivers workshops and electronics kits through his micro-company ART Synthesiser.

"Invisible Colours"
by Jens Hedman

Note

The sound material for this piece derives from old and new synthesizers such as Arp 2600 and Solina String Ensemble, Buchla 200e Series, EMS Synthi AKS and VCS3, Korg Mono / Polly, Kurzweil K2000, Logan, Mini Moog and Mini Moog Voyager, Nord Lead and Nord Modular, Oberheim Xpander, Roland D-50, Sequential Circuits Pro-One and Prophet 10, Serge Modular System, Sid Station, Waldorf Microwave XT, Yamaha DX7 and EX5. In this piece synthetic instruments from more than 5 decades interact to create power and a dynamic expression. The piece also explores spatiality and is composed for five speakers.

Jens Hedman

Jens Hedman is a long time established name in Swedish electro-acoustic music. His music has been performed at festivals, concerts and on radio all over the world and has received several important prizes in international music competitions. Hedman composes both instrumental and electro-acoustic music as well as sound art. He often combines his music with other artistic expressions, collaborating with writers, visual artists, choreographers and architects. To Hedman the spatial content of music is very important and many of his works explore space and movement utilizing multi-channel techniques. He has also participated in several collaborate compositions together with other composers. He has been teaching at Elektronmusikstudion (EMS) in Stockholm for more than 20 years as well as at IDKA, Kapellsbergs music school and workshops in many countries. He was president of the Society for Electro Acoustic Music in Sweden (www.seams.se) 2001-08. Hedman studied EAM-composition at the Royal College of Music in Stockholm and sound art at Stockholm Academy of Dramatic Arts.

"FMRL"
by Jules Rawlinson

Note

FMRL is a structured improvisation of layered processes that investigates the ephemeral nature of frequency modulation coupled with feedback networks and comparators. Transient gestures and grain are shaped out of what would otherwise be a drone or broadband noise. Sonic material is generated using analogue and digital modular sources.
In the analogue domain a wide variety of variegated noise exhibiting pops, clicks, fizz, flutter, splutter and hiss is created as a result of the way that Cwejman filters (in this case in the VM-1 voice module, but also in the MMF-1) respond to high amplitude, high frequency modulation by narrow pulse waves. There are a number of 'sweet spots' in which the interaction of cutoff frequency, resonance and modulating frequency will cause the signal to cut in or out abruptly, or give a more clearly defined dystonic tone rather than broadband noise.

Jules Rawlinson

Dr Jules Rawlinson, Edinburgh College of Art (University of Edinburgh) Jules Rawlinson (1969, UK) designs sounds, visuals and interactions. He composes for and performs with live electronics in solo and small group settings. Performances include broadcasts on Radio 3, recitals alongside composers and technicians from IRCAM, and support slots for artists as diverse as Pole, Ben Vida and Eddie Prevost. He graduated from the University of Edinburgh's MSc Sound Design programme with Distinction in 2006, and was awarded a PhD in Composition by the University of Edinburgh in 2011. He has been working with modular synthesisers since 2000 when he bought his first Nord Modular, and began working with Max/MSP in 2001. He bought the first of his analogue modules in 2007 and his current approach includes elements of all three, investigating different facets of 'variegated noise' (Rawlinson 2011), sound that exhibits an irregular, patchy and streaked nature resembling crackling static and dead air, and transient, gestural character. His scored compositions examine musical systems from the perspective of combinatory relationships and dependencies between sound types, notation, software, and hardware, with subsystems that demonstrate environment, boundaries, structure and interconnectivity. Improvisations focus more on shaping 'biting-point' interactions into formal structures. Complementing his work with modular synthesis, Jules' research interests include developing new approaches for working with adaptable interfaces such as 3D navigators and graphics tablets for audio-visual performance and design, coupled with graphic notation and creative coding. Jules is currently investigating graffiti as graphic score or 'signature sounds'. He is a founding member of the LLEAPP network (Laboratory for Laptop and Electronic Audio Performance Practice), which has fostered an ongoing and reciprocal series of workshops and events at a number of UK institutions, and is a Teaching Fellow in Digital Media at Edinburgh College of Art (The University of Edinburgh). For more information visit http://www.pixelmechanics.com

"Putney" - for live game-audio Ricardo Climent (with invited VCS3 performer Mark Pilkington)
Note Putney "K" is an interactive media composition using graphics-physics-game engine technology to unfold the musical structure of the work. "K" is a potentiometer / sonic scanner retired from a classic 1969 VCS3 synthesizer, who is looking for answers to return home at Putney Bridge, London. To do so, she needs to navigate a labyrinth of synth modules (VCOs, VCFs, VCFs, LFOs) and collect components (vernier pots, VU meters, knobs, pins), electronics (PICS, capacitor, resistors) and circuit schematics. By doing so, she may earn enough compositional esteem to build a modular synth as her new home. The live performance introduces a range of uncontrolled sonic fantasies (aural paidia, as in R. Caillois's typology), organized by solving rules (ludus) as the piece progresses. The retro-like gamepad controller for Putney was specifically designed by Iain McCurdy.
Ricardo Climent Ricardo Climent is Professor of Interactive Music Composition at University of Manchester, UK, where he serves as director of the NOVARS Research Centre and as head of Composition. For the last few years his research has focused on game-audio (e.g. blender, unreal engine). He employs physics-graphics-game engines in compositional environments, using sound and 'the aural' as the primary source for navigation and exploration. Web-links: game-audio projects: game-audio.org; Collection of musical works: electro-acoustic.com; for NOVARS: www.novars.manchester.ac.uk Mark Pilkington Check bio in concert 3 below

"Benjolin" by Patrick Gunawan Hartono. 8 channel surround
Note Benjolin is an electroacoustic composition for eight-channel speakers in which all the sound materials used are the result of Benjolin Synthesizer designed by synthesizer pioneer Rob Hordijk. The compositional structures are basically intuitive with gradual and dramatic dynamic changes that presented by random pulses and square wave sound as what Benjolin offered. Sound spatialasation is done by using spat~ that running in MAX/msp and receiving signal from common DAW software.
Patrick Gunawan Hartono Patrick Gunawan Hartono (INA/NL) is Young Indonesian Electroacoustic Composer, Sound/New Media Artist, member of Awahita Nusantara, whose art and musical interest is to use technology, and scientific approach as creativity tools. Mostly of his works tend to use the original characteristic sound of Indonesian traditional music instruments that being manipulated as a source material. The musical thought behind his works is also strongly influenced by the concept of open structure, and free improvisation of Natives Indonesian Music. His music has been performed in several venues; YCMF (Indonesia), Wocmat (Taiwan), Andong Dance Festival (South Korea) Sound Bridge Festival (KL), ZKM (DE), IRCAM (FR), Behind The Score (NL), NYCEMF (USA), etc. He currently lives in Den Haag, and studies at Codarts Rotterdam Conservatorium for new media composition and actively involved in local and international electroacoustic, and new media activity.

"Stochastic Moods"
by Dave Ross

Note

Stochastic Moods comprises a small suite of 'Balance Situations', determined from the distribution of Control Voltages to a unison of, voltage-receptive 'Resonant Stochastic Oscillators'. Eastern Philosophy and recently, Quantum Theory, both contend that Consciousness is a fundamental property of the Universe, rather than a material creation of the Brain. Stochastic-Electrodynamic Consciousness theory suggests, the Brain, acting as a 'Resonant Stochastic Oscillator', Modulates with an all-pervasive energised substrate with random potential, called the Zero-Point-Field, (ZPF). The ongoing Modulation causes reactions that can achieve a degree of stability, 'Balance Situations', that SED theory suggests, comprise our experience of Consciousness. Stochastic Moods attempts an analogy to the processes of Consciousness Phenomena asserted in SED theory. In the piece, Voltage itself represents the all-pervasive energised ZPF, whose random potential is ordered into audible forms by interaction/modulation with voltage-sensitive equipment, creating musical 'Balance Situations' that exhibit characteristics of both stability and infinite variety.
An analogy aimed at celebrating the richness and multi-dimensionality of Conscious Phenomena. The Conscious ear of the composer/operator becomes the final stage of the circuit, focusing emotional/intuitive and intellectual responses when constructing and modifying the ongoing Patch-Architecture. Decision- making only possible within the realms of Consciousness itself, a Consciousness, that through the act of creating Stochastic Moods, seeks to find its own equivalent in sound.
The Control Voltage source for the entire piece originates from a single 9 volt battery connected to a prototype 'Jump-Step' sequencer built by Jo Grys.
The Voltage is delineated/mixed and re-distributed through handmade and pre-fabricated circuits along with simultaneous voltage and audio responsive processing.
The piece was composed through live improvisation with the hardware, the final mixdown made live and unedited through an analogue mixer to a stand-alone digital recorder. No computer was used at any stage of the composition (except for the bounced audio file)

Dave Ross

Born in East London in 1967, still here! Self-taught Kit drummer - recorded/performed- Bark Psychosis, Andy Cox, Jah Wobble, Frank Chickens, Matt Deighton. Primarily in, 'Kenny Process Team', -Ben Watson describes 'as the only combo who have mastered the poly-rhythms of Trout Mask Replica'. Drumming lead me to Free Improvisation and work with adults with profound special needs, (ongoing), developing a multi-instrumental approach, -producing releases, 'Circle and the Square', from sessions in Day Centres and 'Mystery Lights/Nightflower', with Shakuhachi Maestro Clive Bell, making Wire's top 10 Improv records 2005. A Multi-Instrumental approach leads to an Electro-Acoustic one in trio 'Twinkle3', with Synthesist Richard Scott w/ Clive Bell, producing 'Let's Make a Solar System' (ini.itu Records). Pure electronics soon dominates Composition and Ensemble Improvisation-'Eyetones' shortlisted by the PRS for New Music Award 2010, -Pitch shifting bells and sine-tones countdown the final hour of BST, delineated by the anti-clockwise rotation of the London Eye, -a giant backwards clock plays a piece beginning / ending at the same time. Eye organisation uncooperative, entry withdrawn, but 'Radiophonic Eyetones' broadcast by Resonance FM at the designated hour 2010-13. Ensemble improvisation with electronics in 'Grutronic' (with Richard Scott) and soloists Evan Parker and Orphy Robinson, producing two albums for PSI. Analogue Synthesis causing re-evaluation of music-making and an exploration of rudimentary instrument designs, performing with Mouthbow, Trumps and Frame Drum in duo, 'The Happy Couple', with Judith Goodman, performing at Cecil Sharp House, Bath Folk Festival, South Bank, and featured on National Radio. April 2014, LP release with Clive Bell, 'Recovery Suite' (ini.itu). Homebrew modular forming a purely electronic dialogue with Shakuhachi, in a meditation on pain and medication states. The Suite to be performed Sept 19, 2014, at Museo Wolf Vostell, Spain.

SUNDAY 26th October 2014	
14.00 - 15.00 h	CONCERT THREE (Thaw) Place: John Thaw Studio Theatre (Martin Harris Centre)

"Synthetic Springs". Fixed Media	Rosalia Soria
"Live Improvisation"	Guillaume Dujat des Allimes / Tom Onky Willson
"Foof" 8.1 channel surround	Mark Pilkington
"Sines Fantasy". Fixed Media	Epameinodas Fassianos
"Boids". 5.1 ch. procedural-generative audio	Ignacio Pecino
"Tesla" Live Improvisation Analogue Synthesis	Chelsea Bruno

"Synthetic Springs"
by Rosalia Soria. Fixed Media

Note

This piece is a metaphor for my favourite season in England. It portrays days in spring, sunrises and life blossoming again after the cold winter. On the other hand, sound materials were created using different real-time mass-spring state space mathematical models. In both senses, the piece is a very particular representation of synthetic springs.

Rosalia Soria

Rose Soria, Mexico. Born in Mexico in 1979, studied composition at the "Conservatorio de las Rosas" in Morelia Michoacán, Mexico, with Javier Álvarez Fuentes and Juan Sebastián Lach. She also completed a MSc in Electronics Engineering at Michoacán State University UMSNH in Mexico in 2010. In 2012 she received the PDS awards scholarship to study at NOVARS Research Centre at the University of Manchester, supervised by Prof. Ricardo Climent. Her research is focused on composition using State Space models used for sonification and sound design.

"Live Improvisation" Guillaume Dujat des Allimes / Tom Onky Willson

Guillaume Dujat des Allimes and Tom Wilson
Guillaume Dujat is a Electroacoustic Masters student at the University of Manchester interested in live electronic performance. Tom Wilson is a jazz guitarist currently studying music at the University of Salford.
https://www.facebook.com/guillaume.dujat
https://www.facebook.com/guillaume.dujat

"Foof" 8.1 channel surround
by Mark Pilkington

Note

Foof 8.1 is a multi-channel fixed media composition that derives its sonic content from recordings of analogue semi-modular and modular synthesisers. The piece started life after discovering an EMS VCS3 synthesiser whilst teaching at Lancaster University 2014. This classic synthesiser adorns many of my favourite albums from the 1970's by artists such as Pink Floyd, Jean-Michel Jarre and Tangerine Dream. The rediscovery of this classic synthesiser activated an opportunity to utilize its sonic architecture. Its idiosyncratic and unpredictable way of producing sound, coupled with the visceral interface of a joystick and pinhole patch bay informed the compositional process. My compositional practice is often concerned with initiating processes to uncover and undo the boundaries of electronic sonic devices. The modular approach is ideally suited to the coupling a whole host of elements, practices and relationships that at first make no sense, but which can be sensed; that is, there are aspects of modular synthesis that do not function primarily through signification, or whose contribution to the listening experience is not exhausted by the concept of signification. Improvisations where captured that retained the inherent characteristics of the synthesiser. Recorded onto tape cassette machine, a Zoom H4 and DAW computer added further transformations (for example, the use of analogue tape compression and saturation). Many of the sounds were re-processed via the external signal input of the VCS3, and a Korg MS 20, controlling oscillators, filters and envelopes. The tactility of the interface allowed to elicit the exploration new audio territories. Sounds were continuously shaped to coalesce into morphological profiles revealing musical features; various textures, harmonic and in-harmonic clusters and gestural profiles. Spatial characteristics were further enhanced using an eight channel speaker system. The piece was realised at Thought Universe Studio, Manchester and an 8 channel studio at LICA, Lancaster University 2014.
Weblink: http://markpilkington.org.uk/project/foof/

Mark Pilkington

Mark Pilkington is a performer and composer of electronic and electroacoustic music. Interested in fusing together audio/visual structures that can be manipulated from a score or improvised in real-time thus presenting performances that question traditional concepts of art, music and technology. He works in the areas of screened works, recordings, installation and live performance. Currently a PhD candidate at the University of Manchester (UK). Graduated with an MA in electroacoustic composition from the University of Huddersfield in the UK 2004. He has completed the Summer Intensive Electroacoustic Workshop at the Centre de Création Musicale Iannis Xenakis (CCMIX) in Paris, France 2005 and presented a paper 'Audio/Visual' composition at the BETA conference at FACT Liverpool 2005. Mark also runs his own audio/visual label called 'TUM' - www.thought-universe.co.uk. As the recording artist Thought Universe Mark performs electronic music - Skam (UK), Sonic World Service (UK), Mainline (DK), DalRiada (UK) and Recordcamp (USA) have released his music. He has performed in the UK, Europe and the USA. With live and recorded radio broadcasts around Europe via the EBU.Currently he is a lecturer /educator on the BA Music Production at Futureworks/UCLAN, Manchester. Sound Designer for various computer games companies. In 2013 he completed a PhD in Composition at the NOVARS Research Centre, the University of Manchester under the supervision of Prof Ricardo Climent and Prof David Berezan.

"Sines Fantasy". Fixed Media by Epameinodas Fassianos
Note My compositional methods for the first part of the work (3m 30sec) involve the used of sine waves of different frequencies transformed via specific filters to provide alternative textural forms to the primary cell-like sounds. This includes recursive bouncing and re-filtering until new sonic entities are formed. The second part focuses on the use of time-stretching algorithms applied onto the prior results, so that materials become smoother and more abstract in nature as the piece progresses.
Epameinodas Fassianos Originating from Greece, I attended both the University of York (MA in Music Technology) and the University of Sussex (MA in Composition for Media and Film and MPhil in Musical Composition). My BA in Greece was in Informatics and Computer Technology while my true passion was classic piano. I obtained my Piano Diploma in 2003 with Professor Dimitris Toufexis. In parallel, I obtained the Diplomas in Harmony, Counterpoint and Fugue respectively. Experimental and non-experimental films have always been a huge part of my life. It's amazing how films can transport people to a magical world. I've created an experimental film "Antithesis" and composed the film score. In addition, my Major Project for the MA in Composition was to rescore "Koyaanisqatsi", a film by Geoffrey Reggio (original music by Philip Glass). Moreover, I have a continuous interest in scoring Stan Brakhage's experimental films. I truly believe in film music as a collaborative art and I am fascinated by the effects music can have on a film. My scores are musically rooted, regardless of the techniques or media employed. My influences include Ennio Morricone, Michael Nyman and Vangelis. Despite being a classically trained pianist, my main focus has been computer composing. I enjoy writing in different styles, either for live instruments or using the computer as my main compositional tool. During my studies in the UK, I was introduced to contemporary compositional techniques and their development. That was in fact a big part of my MPhil work. The guidance of Professor Martin Butler (University of Sussex), Dr. Ed Hughes (University of Sussex), Professor Tony Myatt (University of Surrey) and Dr. Andy Hunt (University of York) was valuable and essential.

"Boids". 5.1 ch. procedural-generative audio by Ignacio Pecino
Note Electroacoustic composition based on a "flocking behaviour" algorithm (boids) for real-time procedural sound and generative music. Timbre, gesture and spatialization emerge from the sonification of spatial and kinematic data in a 3D virtual environment (Unity3D+SuperCollider). The piece explores the possible states of the system in terms of spectral density/distribution, harmonicity, entropy (order-disorder) and other physical properties and interactions (e.g. collisions, velocities, etc.)
Ignacio Pecino Originally from Málaga (Spain), where he completed his BMus degree in Music Composition and developed a professional career as a sound engineer. His interests range from technical and fundamental aspects of interactive media and procedural audio to cybernetics, simulism and perceptual organisation. All these disciplines are explored in the context of virtual 3D environments, with an emphasis on generative/emergent systems as non-conventional musical instruments for EA composition. Currently, Ignacio is a Ph.D. candidate at NOVARS Research Centre after completing a Master with Distinction on Electroacoustic Music Composition.

"Tesla" Live Improvisation Analogue Synthesis
by Chelsea Bruno

Note

This composition focuses entirely around the recordings of the modular synthesizer, involving the important element of live improvisation of patching that coincides. The live improvisation over the recording allows a unique experience of the music for the listeners. Live patching in conjunction with the recording demonstrates how the sounds can interact in a live performance setting. This piece focuses on the harmonizing and gradual tuning and timing of the three different oscillator modules and the triggering and filtering of the noise source. The modules in my system harmonize in an interesting way and are very sensitive to cable touch and tuning. I use the computer to record the live improvised set and to apply various effects such as delay, reverb and EQ. I am a modular researcher, enthusiast and fanatic so I believe this conference would be a great place for my live performance. My modular synthesizer, consisting of one row only, shows the capabilities of a select amount of modules. I have only been working with my modular for a little more than a year so I am still learning about it every time I play it, and that is what makes it so much fun for me. I love getting together with other modular enthusiasts to discuss the possibilities of patching. I also aim to develop a design for a new module in my research. I will be bringing my computer, my Motu audio interface and my Eurorack which consists of the following modules: Pittsburgh audiomixer, Doepfer A-131-1 Dual VCA and A-121 Multimode filter, 4MS PEG and Rotating Clock Divider, Malekko Borg fiter, Steady State Fate Quantum Rainbow noise source, a dual cross VCO, STG .COM suboctave generator, Pittsburgh Oscillator, and the Richter Anti-oscillator by Malekko Heavy Industry.

Chelsea Bruno (aka Eden Grey)

Electronic musician and pianist Chelsea Bruno has been composing and releasing music under the artist alias Eden Grey for several years. Her father is a piano technician and musician, which inspired her to compose and pursue a career in music with a growing interest about the mechanisms and technical workings of the piano. Seven years of lessons in classical piano had a major outcome on her aesthetic. First composing songs on the piano in her teenage years, acquiring a MIDI keyboard allowed her to begin recording electronic music in Ableton Live. She pursued an undergraduate degree at the University of Miami in visual art, poetry, and literature, attending electronic music seminar classes as electives and a semester of study abroad at the University of Leicester in 2008. She began giving live performances with her computer in 2007 and began her venture into the world of analog in 2013 when her father gave her a Moog synthesizer as an early graduation gift. Having earned her Masters' degree in music technology at Florida International University, her thesis focused on the history of the vocoder, programming phase vocoders in Max/MSP, the concept of Deep Listening and the affect of music on the mind, the basics of modular synthesis, and composing with selected Buddhist chants and recordings of modular drones. She won the Presidents' Innovation Award to attend the National Association of Music Merchants (NAMM) convention in Anaheim, California, where she first learned about the Eurorack format of modular synthesis. She then further pursued her interest in the field by doing her graduate internship at 4ms Company in the summer of 2013. There, she began building her Eurorack under the instruction and supervision of inventor and founder, Dann Green. She is now on the music composition PhD course at Royal Holloway, University of London.

SUNDAY 26th October 2014 ISLINGTON MILL STUDIOS, Salford	
Ongoing 24-26 October	Islington Mill Gallery - Installation Tintin Patrone, Nils Knott, Daniel van Eendenburg and the Krachkisten Orchestra
11:00 -15:00 h	Tom Bugs of Bugbrand WORKSHOP (II)
14:00 -17:00 h	Sines & Squares Modular Lounge
17.00 - 17.30 h	Patchbay Session by Finlay Shakespeare (Yoga Room)
17:30 - 19:15 h	Masterclass by Rob Hordijk (Yoga Room)
19:30 - 20:00 h	Islington Mill Gallery Performance by Krachkisten Orchestra with Tintin Patrone, Nils Knott and Daniel van Eendenburg
20.00 h	Raffle Draw (analogue kits, music and more) -
20.05 h	Evening CLOSING CONCERT, Islington Mill Club Manoli Moriaty / Melanie O'Dubhshlaine/ Dan_P. (Buchla 200 modular system)

Islington Mill Gallery – Installation (ongoing) 19:30 -20:00 h Performance Tintin Patrone, Nils Knott, Daniel van Eendenburg and the Krachkisten Orchestra
Note See Friday 24 programme note

11:00 -15:00 h Tom Bugs of Bugbrand WORKSHOP (II)
Note See info for this event above: Saturday 24th October 2014 **WORKSHOP (I)**

17.00 - 17.30 h Patchbay Session by Finlay Shakespeare (Yoga Room)
Paper Abstract Voltage controlled filters are an important facet of synthesizer design, and therefore electronic music in general. The topologies used to allow a filter's cut-off frequency to be controlled by an external voltage will alter how a core filter topology will sound. Distortions and other non-linearities are usually added into the filter's audio path in making the cut-off frequency voltage controllable. A selection of discrete voltage control topologies are chosen, discussed and finally examined via the Audio Precision 2700 audio test system. Comparisons are then made between filters, highlighting which voltage control element possesses certain musical and acoustic properties.

Finlay Shakespeare (Future Sound Systems)
Finlay Shakespeare has been working with hardware modular synthesizers since 2005, when he began working under the name Future Sound Systems. He produced small runs of modular synthesis equipment and circuit bent instruments, until moving to primarily Eurorack designs around 2009. In Future Sound Systems designs, Finlay aims to tackle familiar synthesis ideas and practices at new and unique angles. For example, designing open-ended sequencers where any step can practically be used to modulate any patchable parameter, or modified beforehand. His filter design within the Spectral Devastator module is also one of a kind, and does not clone any pre-existing synthesizer filter.
Finlay Shakespeare also writes and records his own electronic music, often employing his own-built synthesis equipment, as Future Image. Finlay recently graduated from the Tonmeister course at the Institute of Sound Recording, Surrey, and is very keen to continue pursuing sonic innovation within the field of sound synthesis.

17:30 -19:15 h Masterclass
by Rob Hordijk (Yoga Room)

Masterclass about Hordijk Systems

Rob Hordijk
Rob Hordijk (The Hague, The Netherlands). One of the most most creative designers in modular syntheis today, Rob specializes in hand-build analog electronic instruments including his Hordijk modular system and standalone boxes somewhere between musical instruments and objets d'art. An example of an instrument designed by Rob is the Blippoo Box, an audio sound generator that operates according to the principles of chaos theory. Rob has been teaching, lecturing and conducting workshops since 1983 at a number of institutes in The Netherlands, and occasionally in other places on this planet

20.00 h Raffle Draw (analogue kits, music and more)

Sines and Squares Raffle

Ticket Price: £3 per ticket or 4 for £10.
Tickets to be sold at the Martin Harris Centre on Saturday 25th October 2014 and at the Islington Mill Studios on Friday 24th and Sunday 26th of October.
Raffle draw: to take place on Sunday 26th at 20:00 h at the Islington Mill.
Winners (numbers) and allocated Prizes: will be published on the sines-squares.org website
Prizes included in the raffle:

Moog Music Werkstatt 01 synthesizer kit,
KOMA Elektronik FT201 Analog filter 10 step sequencer,
Expert Sleepers' Disting multifunction module
Frequency Central Waverunner LFO
Korg littleBits Synth kit http://littlebits.cc/kits/synth-kit
plus modules and other donations (TBA) from Thonk, Analogue Systems, Future Sound Systems, Analogue Solutions

SUNDAY 26th October 2014 ISLINGTON MILL STUDIOS, Salford	
20.05 h	Evening CLOSING CONCERT, Islington Mill Club Manoli Moriaty / Melanie O'Dubhshlaine/ Dan_P. (Buchla 200 modular system)

"Unsound Connections"	Manoli Moriaty
"The Deformed Vowels" project	Melanie O'Dubhshlaine
"Disposable Sound" project	Dan_P
"Live Improvisation"	Dirch Blewn

Unsound Connections
by Manoli Moriaty

Note

Unsound Connections is a developing performance by Manoli Moriaty, involving analogue feedback systems and digital processing. Several mixing desks are interconnected in a manner representing a primitive modular system, with the mixer's preamplifiers forced to produce crude feedback tones. The tones generated by the archaic oscillators are fed into digital sound processors, with their parameters paired with gestural devices attached to the performer's limbs. During the improvised performance, the feedback tones are manipulated by the performer's motion and voice modulations on the digital processors, with the resulting sonic output made of thunderous sub-frequencies, dreamy ambient soundscapes, and noise occurring within the mixer's abused circuitry.

Manoli Moriaty

Manoli Moriaty is a composer, noise artist, and researcher at the University of Salford. His current practice explores themes of interdisciplinarity, collaboration, and indeterminism, with the themes manifesting through data sonification, misuse of technology, and unlikely pairings of beings and machines. His work ranges a wide spectrum of cross-disciplinary performances, generative sound installations, DIY noise systems, and multi-spatial acousmatic compositions. An Athens-born adoptee of Manchester since the late 1990s, Manoli's early musical inclination gravitated towards the emerging rave culture. While studying architecture at the University of Huddersfield, he became involved with the local rave scene. Paired with techno soundsystems, he travelled and performed at clubs, squats, and festivals across the North West and as far as Eastern Europe. During his studies of Popular Music & Recording at the University of Salford, he went on to establish two of Manchester's most popular dance music events, Illuminaughty and Hit n' Run, where he hosted and performed alongside world renowned artists under the moniquer "H Said". His passage into sound art practices came about during postgraduate studies of electroacoustic composition under Craig Vear and Stephen Davismoon, where he developed works that were presented at international music festivals and academic conferences, with performances at MediaCityUK, the New York Electroacoustic Music Festival, ICMC, and the Ionian Academy. More recently, Manoli was awarded a full PhD scholarship by the University of Salford towards researching collaborative performance. He is a member of the Hellenic Electroacoustic Music Composers Association (HELMCA), and the founder and co-curator of the sound art collective Metanast, with their non-profit concert series supported by Sound and Music.
http://manolimoriaty.wordpress.com/

"The Deformed Vowels" project by Melanie O'Dubhshlaine
Note The Deformed Vowels Project. This work was produced utilising the composers speaking voice fed through and synthesized by a Korg MS20 emulator. The resultant sounds are then used as the basis of an improvisation with the composer playing an Evolver module synth using an EWI midi breath controller. Featuring accompaniment from Philip Todd on Korg Wavedrum. Whereas synthesizers in music are regularly used as artificial extensions of the capacities of other musical instruments, I am interested in electronic extensions of the capacity of the human voice. Not the pitched clairity of the performative singing voice, but the staccato rhythms and microtonal changes in pitch of the talking voice. But a talking voice which has been synthesized into abstraction and stripped of communicative utilitarianism. Listening to voices in a language you don't understand or the mutated alien voices which jump out from under layers of shortwave radio static, devoid of meaning, content or signification. For source material, I used myself attempting to form Dutch vowel sounds. I like how in language-learning one experiments with forming the mouth into strange and unnatural shapes. I add improvisations on Electronic Wind Instrument because it seems to embody the whole process in reverse - blowing into an instrument gives form to something as seemingly insubstantial as breath, whereas the synthesized voices are a denial of form and context. The wavedrum accompaniment adds its own form of synthesized punctuation to the process.
Melanie O'Dubhshlaine Melanie O'Dubhshlaine is an artist and musician based in Leeds, West Yorkshire. In a fifteen year musical career) she has performed and composed music based in the noise, improvised, experimental and psychedelic rock genres. As a member of Ashtray Navigations she has appeared at All Tomorrow's Parties (Nightmare Before Christmas, curated by Thurston Moore), Music Lover's Field Companion in Gateshead, Incubate in Tilburg, Netherlands, Swn Festival in Cardiff and Sotto Voce at Cafe Oto, London, also touring the UK, Europe and USA. Her solo work takes the form of two projects; Melanie O'Dubhshlaine concentrates on electronic composition, whilst Ocelocelot is centred in the noise genre. Her background in visual arts leads her to introduce visual elements into her performances. An overriding theme of her work is using unusual instrumentation to extend human expressive capabilities and give voice to previously unheard sounds. She has collaborated with other artists including Neil Campbell, Ashtray Navigations, Part Wild Horses Mane On Both Sides, Bridget Hayden, Uton, John Moloney (Sunburned Hand of the Man) and MV & EE. melanieodubhshlaine.wordpress.com

"Disposable Sound" project by Dan_P
Note "Dan_P is coming down from the hills for a rare performance of his "Disposable Sound" project. He will be playing an improvised piece using a Buchla 200 Modular Synthesizer. Comprised of a Buchla 208 together with other 200 series clones and third party Buchla style modules. The Buchla is fed into the Gotharman Little Deformer adding digital glitch and bit crushing giving contrast to the warm analogue tones of the Buchla 200.
Dan_P Dan_P has been a percussionist all of his life so it is no surprise that the piece will contain rhythmic and percussive sections. Sound is explored and riffs that emerge are played with and playfully developed. Counter timed twisted pastiche acid lines will emerge briefly before being ripped into experimental soundscapes." http://danp.bandcamp.com/

"Live Improvisation"
by Dirch Blewn

dirch blewn (Game of Life Label) resides in the playful, the exploration. with no formal musical training due to an over enthusiastic elder sister on clarinet he has adopted a focused, experimental approach using bent electronics, homemade devices, ciat lonbarde instruments, 1/4' tape manipulations, effects pedals and mastering onto compact cassette.
He performs with a variety of mysterious electronic instruments including Plumbutter, Roolz Gewei, Cocoquantus, Tetrax, Sidrassi & Shynth made by from Ciat-Lonbarde http://www.ciat-lonbarde.net/

https://www.youtube.com/watch?v=AtEXojlY4gw

http://dirchblewn.bandcamp.com/

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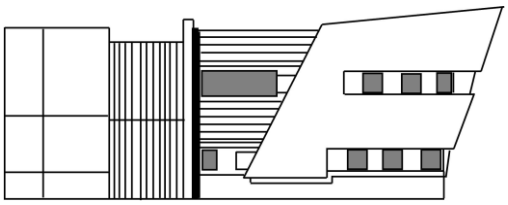
NOVARS Research Centre and the department of Music (University of Manchester)



NOVARS RESEARCH CENTRE
Featuring the MANTIS Surround Sound System

ADMISSION PRICE

TICKETS:

Concerts at the Martin Harris Centre (per concert): £8.50 / concessions £5.50 / £3 (all unreserved seating)
Book tickets by calling The Martin Harris Centre Box Office on 0161 275 8951, open 2.00–4.00pm, Monday to Friday. The box office also opens 1 hour before an event is due to start and closes 15 minutes after the start of the event.

- Patchbay Sessions: Free entrance (limited seating)

Concerts at the Islington Mill Studios (sold separately):
- Friday Opening Concert Advanced £8 tickets - Concessions £5 now available via PAYPAL
  Contact headhungrybellyfull@yahoo.co.uk
- Free entrance: Installation Fluktuation 8 and the Krackisten Orchestra performance
- Free entrance: Sunday Modular Lounge Presenatations
- Free entrance: Talks and Masterclass by Rob Hordrijk
- Free entrance: Closure Concert

WORKSHOP:

Tom Bugs of Bugbrand workshop Price: £55 (All components and tools are provided)
The workshop is suitable for any level of experience from beginners onwards, and any age from 14 (younger if accompanied).

Workshop Details: http://bit.ly/1tW4VBm

VENUES

ISLINGTON MILL, Salford
James St, Salford,
Manchester M3 5HW, UK

The Martin Harris Centre for Music and Drama
(University of Manchester)
Bridgeford St,
Manchester M13 9PL, UK
Parking:
http://www.martinharriscentre.manchester.ac.uk/your-visit/

Coming up at the Martin Harris Centre

One Hand Clapping
7.00pm, Thursday 30th & Friday31st October 2014
John Thaw Studio Theatre

Written by Anthony Burgess
Adapted for the stage and directed by Lucia Cox

Janet doesn't want their lives to change that much – she's quite happy working at the supermarket, cooking for her husband three times a day, watching quiz shows in the evening. But once Howard unleashes his photographic brain on the world, the once modest used-car salesman can't seem to stop. And what he sees as the logical conclusion to his success isn't something Janet can agree to.

Price: £6/ £4

Y Touring Theatre Company presents Hungry
2.00pm, Saturday 1st November 2014
John Thaw Studio Theatre

Hungry by Sarah Daniels is a filmed performance of Y Touring Theatre Company's most recent play. It is a contemporary drama with humour, which tells the story of two very different UK families whose lives are interlinked, exploring the themes of under nutrition, diabetes, obesity and the recent debate around sugary drinks. Susanna is a lawyer in the process of making a fortune representing a global fizzy drinks company, whilst Ruby is her cleaner whose family depends on food banks.

There will be a Q & A session with the play's director Nigel Townsend and others after the performance to discuss the issues raised.

The film is suitable for audiences aged 14+

This event is part of the MANCHESTER SCIENCE FESTIVAL and is free but booking is advised.

Price: FREE

Walter Carroll Lunchtime Concert Series
Piano Recital by Eliza McCarthy
1.10pm, Thursday 6th November 2014
Cosmo Rodewald Concert Hall

Jonathan Harvey	Tombeau de Messiaen
George Crumb	Processional
Tansy Davies	Loopholes and Lynchpins
Luciano Berio	6 Encores
Joe Cutler	Buckley's Hot Licks

Eliza McCarthy, winner of the 2013 British Contemporary Piano Competition, performs works written over the last 50 years. Her interpretations combine the versatility of the piano and the theatricality of performance. Expect haunting strains of extended piano techniques, micro-tonal resonances and beat poetry!

Price: FREE

MUMS Lunchtime Concert Series
Opera Scenes
1.10pm, Friday 7th November 2014
Cosmo Rodewald Concert Hall

Students from the Manchester University Music Society perform a selection of chamber works including extracts from the new student opera, Alex Robinson's Messalina. An exciting chance to experience young opera singers performing at the beginning of their careers.

Price: FREE

MUMS Chamber and Wind Ensembles
7.30pm, Saturday 8th November 2014
Cosmo Rodewald Concert Hall

Barber	Mutations on Bach
Rob Corrin	New Work
Mozart	Serenade in E-flat, K375
Barber	Violin Concerto
Mozart	Symphony No. 36, 'Linz'

Katie MacDonald plays Barber's beautifully lyrical Violin Concerto in a programme that playfully contrasts classic and contemporary, including a new work by Rob Corrin.

Conductors: Mark Heron, Michael Hope and Duncan Gallagher

Price: £10.50/ £6.50 / £3

Walter Carroll Lunchtime Concert Series
Quatuor Danel
1.10pm, Thursday 13th November 2014
Cosmo Rodewald Concert Hall

Tsung-Shien Yang	Sonata for Violin and Piano
Tchaikovsky	Andante cantabile from String Quartet No. 1, Op. 11
Roslavets	String Quartet No. 3

A sonata by Taiwan's leading composer is followed by the most celebrated piece of chamber music by Tchaikovsky – a movement that famously moved Lev Tolstoy to tears - and a quartet by a disciple of Skryabin written in the turbulent early years of the Soviet Union.

This concert will be followed at 2.30pm by
Quatuor Danel Seminar: Masters of Composition

Price: FREE

THE MARTIN HARRIS CENTRE
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The University of Manchester
Bridgeford Street, off Oxford Road
Manchester M13 9PL

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