

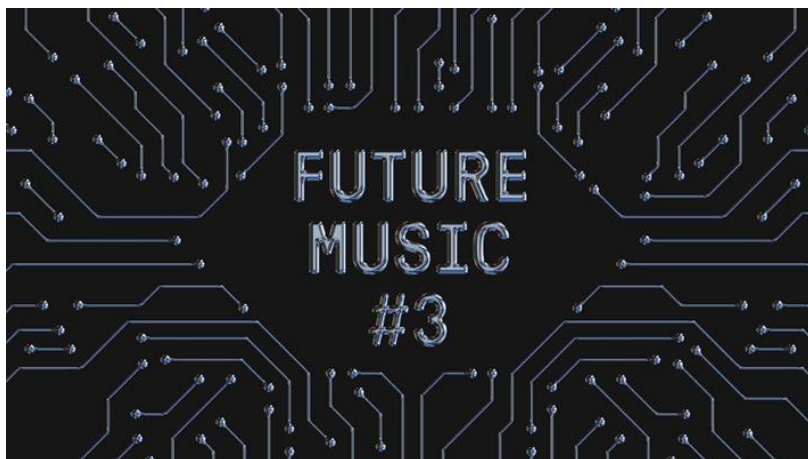
Future Music #3

16-17 June 2021

Welcome from Emily Howard, Director PRiSM

The first RNCM PRiSM *Future Music* festival ran in [2019](#), examining developments in new music and technology – Artificial Intelligence, Virtual Reality, Live Coding and more besides – asking what possibilities lay ahead for the music creators of the future. In *Future Music #2*, in 2020, we focussed in on Artificial Intelligence – examining how we might use technology to work creatively together in new ways.

This year, we celebrate our love of cross-disciplinary collaboration. We're excited to link machine learning specialists with audiovisual artists, and to hear health data researchers perform music created from their own COVID-19 experiences. We're thrilled to present *The Awesome Machinery of Nature*, a new work commissioned especially for Future Music #3 by our first PRiSM Scientist in Residence, Memo Akten.



All events will be livestreamed, [click here](#) to watch each broadcast. Social Media streaming details are included in the detailed listings (see next).

WED 16 JUN 2021 // Livestream 5pm – 8pm

Unsupervised

The Machine Learning for Music (ML4M) Working Group

“Unsupervised Learning is the “Dark Matter” of AI” Yann LeCun



AURAMACHINE by Vicky Clarke

Unsupervised is a new concert series created by the Machine Learning for Music (ML4M) Working Group – a community of composers and audiovisual artists exploring the creative use of emerging Artificial Intelligence and Machine Learning technologies led by PRiSM Lecturer in Composition, [Dr. Sam Salem](#) and [Professor Ricardo Climent](#), Professor of Interactive Music Composition and Director of [NOVARS](#) Research Centre at University of Manchester.

ML4M includes postgraduate students from both RNCM and University of Manchester, as well as guest artists, supported by Machine Learning experts at the **Alliance Manchester Business School** and PRiSM.

Unsupervised will include new works by Anastasios Asonitis, Vicky Clarke, Hongshuo Fan, Robert Laidlow, Zakiya Leeming, Tywi Roberts, Chris Rhodes & Ellen Sargen. They will be joined by Dr Salem and Professor Climent for the Panel Q&A. A detailed programme is available [here](#).

Programme:

5pm Livestream performances (part 1)

6pm Panel Q&A led by Dr. Sam Salem (PRiSM) and Professor Ricardo Climent (NOVARS)

7pm Livestream performances (part 2)

You will be able to submit questions to the Panel, in advance and during the event, through Twitter to @RNCMPriSM using the hashtag #PRiSMFutureMusic or by e-mailing the PRiSM Centre Manager sam.duffy@rncm.ac.uk.

You can also watch over on [Twitter](#).

THU 17 JUN 2021 // Livestream 1pm – 2pm

Dawn, on the Morning After the Storm

Zakiya Leeming



Sunrise by [Vicenfoto](#)

Dawn, on the Morning After the Storm is a new work by composer and PRiSM Doctoral Researcher, [Zakiya Leeming](#), who has been collaborating with health data researchers since 2018 to create music informed by their work (watch performances from Leeming's previous work with Connected Health Cities [here](#)).

The piece is a result of discussions with UK members of the global International Severe Acute Respiratory and Emerging Infection Consortium ([ISARIC](#)) about their experiences working through the COVID-19 outbreak.

[ISARIC4C](#), led by investigators from the University of Edinburgh, University of Liverpool and Imperial College London, is recognised as the sovereign COVID-19 research programme to meet urgent public health needs for the UK. It is a collaboration of over 200 scientists from 11 institutions and NHS teams from 350 hospitals. Outputs from the project have informed the UK's response to the current pandemic, based on data and biological samples from patients in hospitals across the UK, and it is one of the largest COVID-19 projects in the world.

When Leeming asked ISARIC4C Chief Investigator, Professor Calum Semple OBE, what a piece about his experience should describe, Semple replied, '*Like Dawn, on the morning after the storm*'. For Semple, it was about coming together to play, in the same way the consortium came together to respond to the challenge of the virus.

The performance will be followed by a recorded discussion between the composer and ISARIC4C performers.

You can also watch over on [Twitter](#).



Professor Calum Semple OBE by Dan Bentley Photography

Performed by:

Bagpipes: [Professor Calum Semple](#) OBE, Chief Investigator ISARIC4C, Professor of Child Health and Outbreak Medicine & Consultant Respiratory Paediatrician, University of Liverpool & Alder Hey Children's Hospital

Clarinet: [Murray Wham](#), Database Manager ISARIC4C, Bioinformatician, Edinburgh University

Voice: [Dr Olivia Swann](#), Paediatric Analysis Lead, ISARIC4C, Clinical Lecturer in Paediatric Infectious Diseases, University of Edinburgh

Piano: [Professor Ewen Harrison](#), Informatics Lead ISARIC4C, Professor of Surgery and Data Science University of Edinburgh

Violin: [Professor Paul Klenerman](#), Investigator Immunology ISARIC4C, Sidney Truelove Professor, Nuffield Department of Medicine, University of Oxford

Violin: [Dr Shona Moore](#), Immunology Researcher ISARIC4C, Postdoctoral Research Associate, University of Liverpool

Violin: [Dr Riinu Pius](#), Data Scientist ISARIC4C, Senior Data Manager, The University of Edinburgh, Centre for Medical Informatics

Violin: [Dr Louisa Pollock](#), Co-author Paediatric Analysis ISARIC4C, Consultant in General Paediatrics and Paediatric Infectious Diseases, Royal Hospital for Children, Glasgow

Funded by the Northern Health Science Alliance (NHSA) and Connected Health Cities (CHC) with support from PRiSM.

THU 17 JUN 2021 // Livestream 8pm – 9:30pm

The Awesome Machinery of Nature

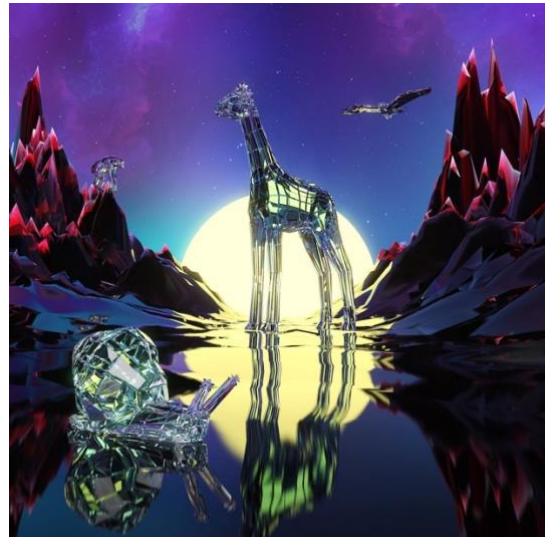
Memo Akten (World Première)

The Michael Kennedy International Research Lecture + Live Q&A

“*The Awesome Machinery of Nature*” is a video and sound installation, currently designed for the web, with plans for it to be later adapted to an immersive multi-screen, multi-speaker installation.

The work is an evolution of Akten’s “*Simple Harmonic Motion*” – a series of works that investigate the emergence of complex behaviour through the interaction of very simple rules.

Building on these ideas, “*The Awesome Machinery of Nature*” goes further to examine the layers of abstraction that emerge as a result of the human mind observing, trying to make sense of, and re-simplifying the emergent complex behaviour.



The Awesome Machinery of Nature by Memo Akten

The work also draws inspiration from the many scales of complexity and layers of abstraction that we observe in the natural world and the webbed ecologies that sustain complex ecosystems heavily dependent on the balanced co-existence of many components. It embraces and celebrates the interconnectedness of all human, non-human, living and non-living things across many scales of time and space.

Programme:

- 8.00pm Lecture by Memo Akten (*The Michael Kennedy International Research Lecture*)
Introduced by Professor Barbara Kelly, Director of Research, RNCM
- 8.50pm World Première of *The Awesome Machinery of Nature*
- 9.00pm LIVE Q&A with Memo Akten and Dr Sam Salem (PRiSM)

You will be able to submit questions for Memo Akten, in advance and during the event, via Twitter to @RNCMPriSM using the hashtag #PRiSMFutureMusic or by e-mailing the PRiSM Centre Manager sam.duffy@rncm.ac.uk

You can also watch over on [Twitter](#) and [Facebook](#).