

Last September, we opened up the debate about what 'originality' means or, indeed, if it actually exists or is possible to achieve. Now, 10 months later, as we approach the end of our *Sounds Original?* season, we consider what 'originality' might look like into the future.

Future Music looks at current developments in new music and technology - Artificial Intelligence, Virtual Reality, Live Coding and more besides - asking what possibilities lie ahead for the music creators of the future.

This will be a day of cutting-edge ideas, performances, demos and debate and a chance to consider the age we live in - questioning not just the impact of machines on music but also on us as people.

Please note that seating for events in Studio 8 is limited

## **FUTURE MUSIC**

1pm - 2pm (drop - in) // Lower Concourse

# **DEMO: DIY AI**

Generate AI-produced music, in this open demonstration led by composer and AI researcher **Robert Laidlow**.

2pm - 2.15pm // Studio 8

# **FUTURE MUSIC?**

Mathematician and author of his latest book *The Creativity Code* **Marcus du Sautoy** offers an opening provocation.

2.30pm - 3.30pm // RNCM Concert Hall

# **VIRTUAL REALITY +**

Composer and VR researcher **Jonathan Packham** presents some of the latest research in Virtual Reality headset scoring, including new works scored using VR by Jonathan himself, and RNCM composers.

**Stephen Bradshaw** Panoptic #1 for piano, timpani, CCTV cameras and motion sensors

Athanasia Kontou piano Darren Gallacher timpani

**Tywi Roberts and Bofan Ma** Dying Archon #rulingwheel\$1 **Simeon Evans** saxophone

Jonathan Packham SECRET ANIMALS

Deni Teo cello

4pm - 4.45pm // Studio 8

# LIVE CODING

Data musician and live coder **Shelly Knotts** leads this workshop/talk/performance on the latest developments in live coding.

**Tywi Roberts** Active Restraint for Sonic Pi and piano **Aaron Breeze** *piano* 

5.30pm - 6.15pm // Studio 1

# MUSICAL ROBOTS

Led by **Nicholas Moroz**, the pioneering **Explore Ensemble** showcase Patricia Alessandrini's robotic piano machine, and perform a new work by **Zakiya Leeming**.

Zakiya Leeming At the Node of Ranvier
Patricia Alessandrini Tracer la lune d'un doigt

Explore Ensemble:

Taylor Maclennan flute
Alex Roberts clarinet
Sarah Park piano
David Lopez violin
Morag Robertson viola
Deni Teo cello

Nicholas Moroz electronics, co-founder, artistic director

6.30pm - 7:15pm // Studio 8

# DISCUSSION: WHAT DOES THE FUTURE HOLD?

Applied Futurist **Tom Cheesewright** joins the day's contributors **Jonathan Packham, Shelly Knotts** and CEO of national new music charity Sound and Music **Susannah Eastburn** as they share their visions for the future of music creation.

# Panel:

Tom Cheesewright (chair) Applied Futurist Jonathan Packham composer Shelly Knotts data musician Susannah Eastburn CEO, Sound and Music 7.30pm - 9pm // RNCM Concert Hall

# THE VOICE OF THE MACHINE

Mathematician, author and broadcaster Marcus du Sautoy joins composers Emily Howard, Nicholas Moroz and Robert Laidlow in this introduction to the latest developments in AI and new music, featuring performances of new works incorporating AI technology, discussion, and an interactive Turing test – can you tell the difference between genuine Bach and AI-generated Bach?

This event showcases the ongoing research work of the RNCM Centre for Practice and Research in Science and Music (PRiSM). For further information about PRiSM please see <a href="here">here</a>

# Turing Test

Aaron Breeze piano

Nicholas Moroz bot.radio

Robert Laidlow Three Entistatios for Chamber Ensemble
RNCM New Ensemble

RNCM New Ensemble:

Jack Sheen conductor

Isabella Baker, William McGahon violins
Peter Hartley viola

Malcolm Goodare cello

Danny Vassallo double bass
Seb Marshall clarinet
Eleanor Mills bassoon
Sarah Austen soprano/alto saxophone
Victoria Schofield horn
Bethan Plant trumpet

Alexander Walker, Leonardo Caleffi percussion

## **FUTURE MUSIC**

Post-concert (drop - in) // Lower Concourse

# **DEMO: DIY AI**

Generate AI-produced music, in this open demonstration led by composer and AI researcher **Robert Laidlow**.

# **BIOGRAPHIES**

# ROBERT LAIDLOW

Robert Laidlow is a composer and performer based in London and Manchester.

For full biog see here

# MARCUS DU SAUTOY

Marcus du Sautoy is author of the best-selling popular mathematics book "The Music of the Primes". He is the Charles Simonyi Professor for the Public Understanding of Science at the Oxford University.

For full biog see here

## STEPHEN BRADSHAW

Stephen is a composer and sound designer, studying at the RNCM.

For full biog see here

## TYWI ROBERTS

For full biog see <a href="here">here</a>

## **BOFAN MA**

Bofan Ma is a Research student working on projects with the Experimental/Exploratory Music Research Centre (EEMRC) at the RNCM.

For full biog see <a href="here">here</a>

## JONATHAN PACKHAM

Jonathan Packham is a composer, researcher and performer of contemporary music based in Oxford, UK. For full biog see <a href="here">here</a>

## SHELLY KNOTTS

Shelly Knotts is a composer, performer and improvisor of live electronic, live coded and network music. For full biog see <a href="here">here</a>

#### **NICHOLAS MOROZ**

Nicholas Moroz is a composer, researcher, and electronic music performer, currently based in London and Oxford. He is the artistic director of Explore Ensemble.

For full biog see <a href="here">here</a>

# **EXPLORE ENSEMBLE**

Explore Ensemble voyages towards the radical frontiers of new music, offering audiences outstanding performances of internationally acclaimed composers, advocating music rarely heard in the UK, and fostering music for the future by working closely with young composers.

For full biog see here

## **ZAKIYA LEEMING**

Manchester-based composer Zakiya Leeming is undertaking her PhD in composition at the Royal Northern College of Music where she studies with David Horne and Emily Howard.

For full biog see <a href="here">here</a>

## TOM CHEESEWRIGHT

Futurist speaker Tom Cheesewright is one of the UK's commentators on technology and tomorrow.

For full biog see <a href="here">here</a>

#### SUSANNA EASTBURN

Susanna Eastburn is the Chief Executive of Sound and Music (www.soundandmusic.org).

For full biog see <a href="here">here</a>

#### **EMILY HOWARD**

Emily Howard's music is known for its particular connection with science. She is a Professor of Composition at the RNCM and Director of PRiSM, the RNCM Centre for Practice & Research in Science & Music.

For full biog see <a href="here">here</a>

SAT 06 JUL // 3pm and 8pm

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