

Centre for Digital Music

Professor Mark Sandler

- Digital Music Research @QMUL began 2001, C4DM formed 2003
- World-leading research into digital technologies for new understanding and innovation in music and audio.
- Founding member of BBC R&D Audio Research Partnership
- >60 people: 16 academics, 35 PhD students, 15 post-docs
- Research funding: over £25M since 2007
- Conferences: ISMIR2005, ICA2007, MPEG2009, CMMR2012, MCM2015
- Teaching: Bachelors, Masters, Masters by Research, PhD
- Software: Sonic Visualiser, SoundBite, TONY, ...
- Partners: BBC, last.fm, Yamaha, Abbey Road, Universal, omnifone, Microsoft Research, Fraunhofer, ...

C4DM Academic Staff



Prof Mark Sandler
Director of C4DM



Dr Simon Dixon
Deputy Director of C4DM



Dr Mathieu Barhet



Dr Nick Bryan-Kinns



Prof Elaine Chew



Dr Gyorgy Fazekas



Prof Pat Healey



Dr Andrew McPherson



Dr Marcus Pearce



Dr Josh Reiss



Dr Tony Stockman



Dr Bob Sturm



Prof Geraint Wiggins



Dr Emmanoul
Benetos

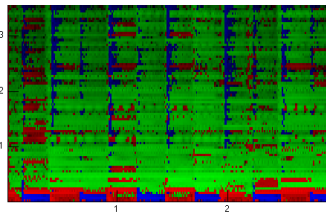
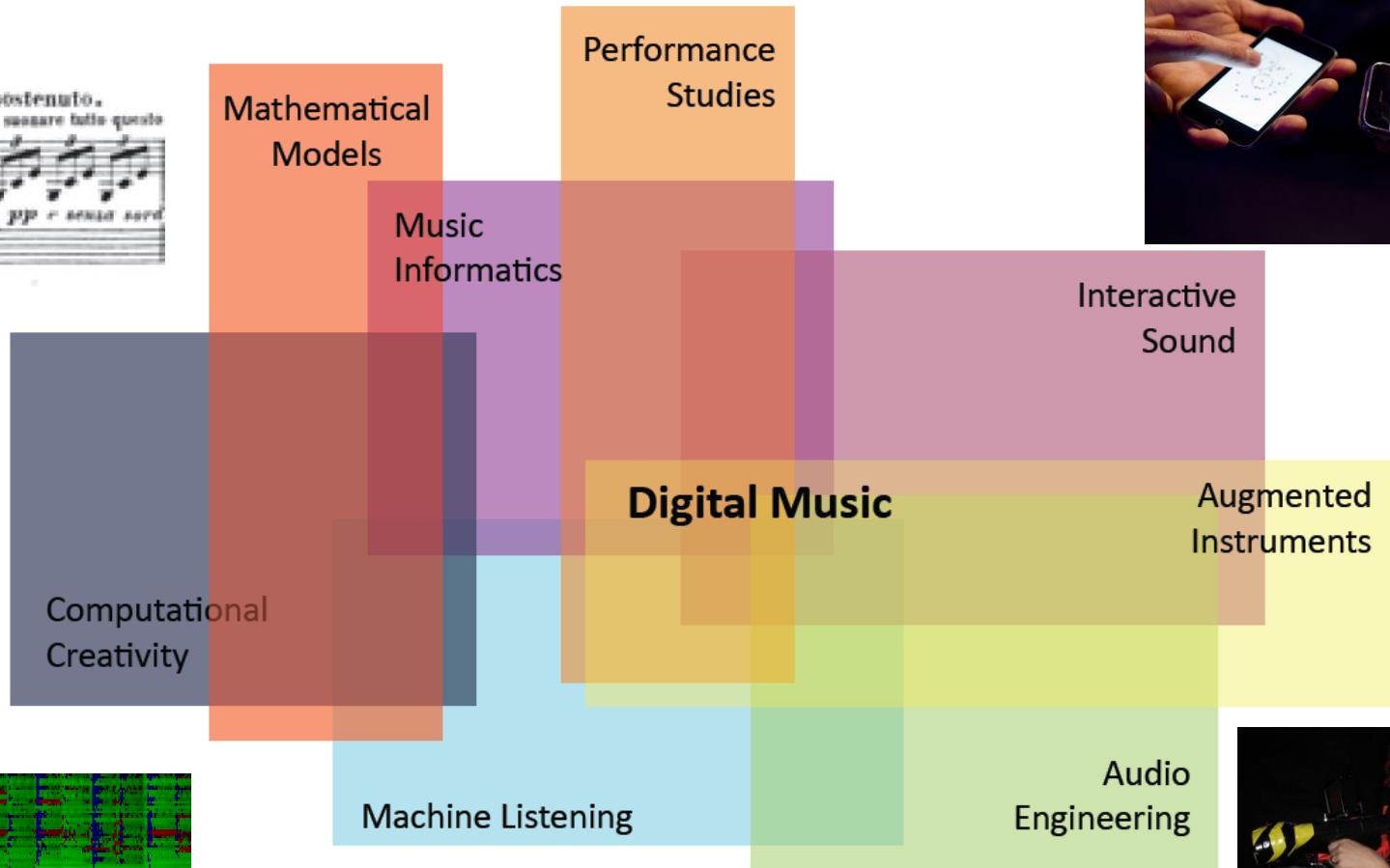


Dr Dan
Stowell



Dr Matthias
Mauch

C4DM Research Areas



Research Themes

- **Audio engineering**



Prof Mark Sandler



Dr Josh Reiss

Digital audio effects

Autonomous production

Multitrack signal processing

Spatial audio

Intelligent systems for live sound

Streaming & compression

Digital power, data converters

Research Themes

- Audio engineering
- **Augmented instruments and interfaces**



Dr Nick Bryan-Kinns



Dr Tony Stockman



Dr Andrew McPherson

Real-time interactive systems

Interactive soundscapes

Automated composition

Data sonification

New musical instruments

Sound synthesis

Gestural control

Multitouch sensing

Research Themes

- Audio engineering
- Augmented instruments and interfaces
- **Music informatics**



Dr Bob Sturm



Dr Simon Dixon



Dr Dan Stowell



Dr Mathieu Barthet



Dr Gyorgy Fazekas



Prof Mark Sandler



Dr Matthias Mauch



Dr Emmanoul Benetos

Music information retrieval
Music recommendation and navigation
Automatic music transcription
Machine listening
Semantic analysis
Segmentation
Music web technologies

Research Themes

- Audio engineering
- Augmented instruments and interfaces
- Music informatics
- **Music making, creativity, and cognition**



Dr Marcus Pearce

Psychoacoustics

Empirical aesthetics

Neuroimaging



Prof Elaine Chew

Ensemble interaction

Performance visualisation

Beat tracking & rhythm analysis

Networked performance



Prof Geraint Wiggins

Communication modelling

Innovation and improvisation

Music information dynamics



Prof Pat Healey

Research Funding

Over £25 million since 2007

National Grants (EPSRC, JISC, TSB, ...)

- OMRAS-2 - Online Music Recognition And Searching
- Information Dynamics of Music
- Sustainable Software for Digital Music & Audio Research
- Making Musical Mood Metadata (M4) with BBC
- EPSRC £1M Platform Grants (2007-12, 2013-18)
- FAST-IMPACt Programme Grant £6M (2014-2019)

European Projects

- EASAIER- Enabling Access to Sound Archives
- SMALL- Sparse Models, Algorithms & Learning
- SIMAC- Semantic Interaction with Music Audio Contents

omras2



Industry Collaboration

