Programme

10:00	**Welcome, Simon Dixon**
10:10	**KEYNOTE** "Sound on the brain - insights from functional neuroimaging and neuroanatomy", **Prof Sophie Scott - (Institute of Cognitive Neuroscience - UCL)**
10:50	Building style-aware neural MIDI synthesizers using simplified differentiable DSP approach, **Sergey Grechin and Ryan Groves (Infinite Album)**
11:00	Completing Audio Drum Loops with Transformer Neural Networks, **Teresa Pelinski (Queen Mary University of London), Behzad Haki and Sergi Jordà (Pompeu Fabra University)**
11:10	Evaluation of GPT-2-based Symbolic Music Generation, **Berker Banar and Simon Colton (Queen Mary University of London)**
11:20	NASH: the Neural Audio Synthesis Hackathon, **Ben Hayes, Cyrus Vahidi and Charalampos Saitis (Queen Mary University of London)**
11:30	**5 min break**
11:35	Designing a synthesiser to elicit a feeling of perceived tension, **Connor Welham, Bruno Fazenda, and Duncan Williams (Acoustic Department, University of Salford)**
11:45	Is Automatically Transcribed Data Reliable Enough for Expressive Piano Performance Research?, **Huan Zhang, Simon Dixon (Queen Mary University of London)**
11:55	CAMAT: Computer Assisted Music Analysis Toolkit, **Egor Poliakov (IHMT Leipzig) and Christon R. Nadar (Semantic Music Technologies, Fraunhofer IDMT)**
12:05	An Investigation on Pitch-Based Features on Selected Music Generation Systems, **Yuqiang Li, Shengchen Li (Xi'an Jiaotong-Liverpool University) and George Fazekas (Queen Mary University of London)**
12:15	**Lunch break**
13:15	**KEYNOTE** "Learning interpretable music representations: from human stupidity to artificial intelligence". **Assistant Prof Gus Xia - (NYU Shanghai)**
13:55	**Announcements and Intro to Gather Town**
14:00	**POSTER SESSION** Open poster session where the participant will be able to view the poster and chat with the authors.
16:00	**Close ***

* - There will be an opportunity to continue discussions after the Workshop in a nearby Pub/Restaurant for those in London.

Posters

1	Sketching Sounds: Using sound-shape associations to build a sketch- based sound synthesizer, **Sebastian Löbbers and George Fazekas (Queen Mary University of London)**
2	Everyday Sound Recognition with Limited Annotations, **Jinhua Liang, Huy Phan and Emmanouil Benetos (Queen Mary University of London)**
3	Generating Comments from Music and Lyrics, **Yixiao Zhang and Simon Dixon (Queen Mary University of London)**
4	AI-Assisted FM Synthesis, **Franco Caspe, Mark Sandler and Andrew McPherson (Queen Mary University of London)**
5	Algorithmic Music Composition for The Environment, **Rosa Park (San Francisco State University)**
6	The Vienna Philharmonic's New Year's Concert Series: A Corpus for Digital Musicology and Performance Science, **David M. Weigl and Werner Goebl (University of Music and Performing Arts Vienna)**
7	An Interactive Tool for Visualising Musical Performance Subtleties, **Yucong Jiang (University of Richmond)**
8	A Benchmark Dataset to Study Microphone Mismatch Conditions for Piano Multipitch Estimation on Mobile Devices, **Jakob Abeßer, Franca Bittner, Maike Richter, Marcel Gonzalez and Hanna Lukashevich (Fraunhofer IDMT)**
9	Looking at the Future of Data-Driven Procedural Audio, **Adrián Barahona-Ríos (University of York)**
10	Making graphical scores accessible to visually impaired people: A haptic interactive installation**, Christina Karpodini**
11	Acoustic Representations for Perceptual Timbre Similarity**, Cyrus Vahidi, Ben Hayes, Charalampos Saitis and George Fazekas (Queen Mary University of London)**
12	Investigating a computational methodology for quantitive analysis of singing performance style, **Yukun Li, Polina Proutskova, Zhaoxin Yu and Simon Dixon (Queen Mary University of London)**
13	Variational Auto Encoding and Cycle-Consistent Adversarial Networks for Timbre Transfer, **Russell Sammut Bonnici, Martin Benning, & Charalampos Saitis (Queen Mary University of London)**
14	Characterizing Texture for Symbolic Piano Music**, Louis Couturier (Universite de Picardie Jules Verne), Louis Bigo (Universite de Lille)and Florence Leve (Universite de Picardie Jules Verne and Universite de Lille)**
15	Beat-Based Audio-to-Score Transcription for Monophonic Instruments, **Jingyan Xu (Music X Lab, NYU Shanghai)**
16	Predicting hit songs: multimodal and data-driven approach, **Katarzyna Adamska, Joshua Reiss (Queen Mary University of London)**
17	Character-based adaptive generative music for film and video games, **Sara Cardinale and Simon Colton (Queen Mary University of London)**
18	Physically-inspired Modelling with Neural Networks, **Carlos De La Vega Martin and Mark Sandler (Queen Mary University of London)**
19	Hearing a Volumetric Drum, **Rodrigo Diaz and Mark Sandler (Queen Mary University of London)**
20	Computational Modelling of Jazz Piano via Large-Scale Automatic Transcription, **Drew Edwards and Simon Dixon ((Queen Mary University of London)**

21	Music Emotion Mood Modelling using Graph and Neural Nets, **Maryam Torshizi, George Fazekas, and Charalampos Saitis (Queen Mary University of London)**
22	Virtual Placement of Objects in Acoustic Scenes, **Yazhou Li, Lin Wang and Joshua Reiss (Queen Mary University of London)**
23	Real Time Timbre Transfer with a Smart Acoustic Guitar, **Jack Loth and Mathieu Barthet (Queen Mary University of London)**
24	Music Interestingness in the Brain, **Chris Winnard (Queen Mary University of London), Preben Kidmose (Aarhus University), Kaare Mikkelsen (Aarhus University) and Huy Phan (Queen Mary University of London)**
25	Intelligent music production, **Soumya Vanka (Queen Mary University of London), Jean Baptiste Roland (Steinberg) and George Fazekas (Queen Mary University of London)**
26	Composition-aware music recommendation for music production, **Xiaowan Yi and Mathieu Barthet (Queen Mary University of London)**
27	Dynamic mood recognition in film music, **Ruby Crocker and George Fazekas**; **(Queen Mary University of London)**
28	The Sound of Care: researching the use of deep learning and sonification for the daily support of people with Chronic Pain, **Bleiz Del Sette and Charalampos Saitis (Queen Mary University of London)**
29	Embodiment in Intelligent Musical Systems, **Oluremi Falowo and Charalampos Saitis (Queen Mary University of London)**

Keynote Talks

Keynote 1. By **Prof. Sophie Scott** -Director, Institute of Cognitive Neuroscience, UCL.

Title: "Sound on the brain - insights from functional neuroimaging and neuroanatomy"

Abstract: In this talk I will use functional imaging and models of primate neuroanatomy to explore how sound is processed in the human brain. I will demonstrate that sound is represented cortically in different parallel streams. I will expand this to show how this can impact on the concept of auditory perception, which arguably incorporates multiple kinds of distinct perceptual processes. I will address the roles that subcortical processes play in this, and also the contributions from hemispheric asymmetries.

Keynote 2: By **Prof. Gus Xia** - Assistant Professor at NYU Shanghai

Title: "Learning interpretable music representations: from human stupidity to artificial intelligence"

Abstract: Gus has been leading the Music X Lab in developing intelligent systems that help people better compose and learn music. In this talk, he will show us the importance of music representation for both humans and machines, and how to learn better music representations via the design of inductive bias. Once we got interpretable music representations, the potential applications are limitless.