

News

Sound and Music Computing Conference

The 17th Sound and Music Computing Conference (SMC) was held virtually 24–26 June 2020, jointly organized by the University of Turin, the Polytechnic University of Turin, and the Conservatory of Turin. The virtual edition of the conference included oral and poster presentations of research, question and answer sessions with authors, musical performances, and keynote talks. Presentations and performances were prerecorded, streamed during the conference, and archived online. The theme of the conference was “Imaging Sound,” inviting participants to explore topics such as audio and music for films, audiovisual composition, color in sound and image, history and aesthetics of visual music, auditory and visual crossmodal correspondences, and improvisation in audiovisual composition. Keynotes talks were given by Anna Xambó, who discussed collaborative and participatory music experiences through the lens of human–computer interaction; by Marek Chołowiecki, who spoke about sound space kinetics; and Pierre Alexandre Tremblay, who discussed his multifaceted approach to sound and music computing research.

SMC’s musical program featured performances of Xenia Pestova’s *Glowing Radioactive Elements (Radium - Plutonium - Radon)* for magnetic resonator piano, Alvin Curran’s *Covidly Yours - Making Music with Anything*, and Mauro Lanza’s *The 1987 Max Headroom Broadcast Incident* for string quartet and electronics, performed by Quartetto Maurice. Paper presentations included a proposal for an XML-based standard for Web audio, a method for embedding electronics in

three-dimensionally printed musical instruments, and the use of three-dimensional ear shape to estimate head-related transfer functions. Winning SMC’s Best Paper Award was a proposal and evaluation of a machine learning model for predicting guitar playing techniques from the motions of its player.

Web: smc2020torino.it

International Conference on Live Interfaces

The fifth International Conference on Live Interfaces took place 9–11 March 2020 at the Norwegian University of Science and Technology in Trondheim, Norway. Held biennially, the conference brought together people working with live interfaces in the performing arts—including music, the visual arts, dance, puppetry, robotics, and games—with a focus on expressive interface technologies for performance. The conference consisted of paper presentations and musical performances related to these subjects. The theme of the conference was “Artificial Intelligence, Artistic Intelligence, Automated Emotional Intelligence,” aimed at examining the role of artificial intelligence in creative practices. A keynote talk was given by Rebecca Fiebrink, discussing the use of machine learning as a “meta-instrument.” Paper topics included the use of reinforcement learning to explore mappings of gesture to sound, a system for generating dance choreography in real time and signaling this to a dancer through haptic actuators, and the use of frameworks for building computer games as a tool for developing audiovisual creative works. Among the conference’s musical programming, Daniel Formo’s *The Orchestra of Speech* explored human speech as a means for building musical motives abstracted from their linguistic content. In Franziska

Baumann’s *The Echo I Touch*, the composer processed her improvised vocal performance using software controlled by her physical gestures, mediated by a glove interface.

Web: live-interfaces.github.io/liveinterfaces2020

Music Encoding Conference

The 2020 Music Encoding Conference (MEC) took place virtually 26–29 May 2020, hosted by Tufts University. MEC comprised keynote lectures, presentations of research papers and posters, online discussion sessions of presentations, and workshops related to the digital representation of music. The conference’s keynote speakers were Timothy Duguid, who proposed greater integration of music encoding education in digital humanities curricula, and Estelle Joubert, who presented her work mapping 18th-century networks of operatic fame using computer graph algorithms and visualizations. Research presented at the conference included a prototype of a software editor for mensural musical notation, a tool for comparing differences between two encoded representations of music, and a study of digital representations of figured bass in the music of Johann Sebastian Bach.

Web: music-encoding.org/conference/2020

Network Music Festival

The fourth Network Music Festival took place 15–18 July 2020 and was held virtually. As stated by the festival’s organizers, its aim was to explore digital music, art, and research and investigate the impact of networking technology on musical creation and performance through musical performances, workshops, and discussion. The festival’s musical programming

comprised 50 performances over nine concerts. One concert showcased works developed using a new browser-based framework for musical live coding and machine learning. Two other concerts, in collaboration with the TOPLAP Mexico and TOPLAP Berlin organizations, hosted algorave-style live-coded dance music in virtual reality environments. Online discussions were also hosted between concert pieces, in which artists were invited to answer questions about their work and the technology used. The festival's workshop series covered the use of machine learning in Web-based musical instruments, networked collaborative editing of software written in the

SuperCollider programming language, and tools for streaming live musical performances.

Web: networkmusicfestival.org

Splice Festival

The third Splice Festival took place 20–22 February 2020 at Miami University in Oxford, Ohio. According to the organizers, the aim of the festival was to showcase a blend of live performances and new technologies. Michael Flynn's *Tourmaline* augmented a harp performance with electronic processing, with the composer aiming to create a musical analog to the piece's namesake gemstone.

Margaret Schedel and Christopher Howard's *Tattoo of a Gesture* incorporated various percussion instruments as well as wooden slats augmented by textural elements, amplified and processed electronically. The festival also included presentations on topics such as aesthetics, technology, and issues of performance practice. These included a history of electronic wind instruments and approaches to microtonality. A series of workshops focused on creating rhythm games for computers, the mediation of technology and virtuosity in music performance, and building a basic synthesizer circuit.

Web: splicemusic.org/festival/iii/about