



SMC 2023

CALL FOR PAPERS AND MUSIC

SMC 2023 (Sound and Music Computing) is a multifaceted event around acoustics, music, and audio technology. It will take place in Stockholm (Sweden) on June 12-17, 2023 on the theme of “SOUND: ART, SCIENCE, AND EXPERIENCE”.



Call for papers

SMC 2023 welcomes contributions that are related to the core topics in Sound and Music Computing research.

For the SMC 2023 call for papers (CFP), we want to go back to the formal definition of the SMC field, with some small updates, and avoid the traditional long list of topics used in CFPs which, being a list, can have limitations and ambiguities (we have created a word cloud instead)

Sound and Music Computing (SMC) research approaches the whole sound and music communication chain from a multidisciplinary point of view. By combining scientific, technological and artistic methodologies it aims at understanding, modelling and generating sound and music through computational approaches.

(from <https://smcnetwork.org/roadmap.html#define>)

The **technological and computation aspect** of sound and music communication chain covers all aspects of the relationship between sonic energy and meaningful information, both from sound to sense (as in musical content extraction or perception), and from sense to sound (as in music composition or sound synthesis), sense to sense (as in sound imagination) and sound to sound. Generally speaking this includes all types of sounds and human communication processes except speech.

For SMC 2023 the other elements contained in the definition statement should be understood as follows:

The **multidisciplinary point of view** relates to the use of various research methodologies and disciplines from the natural and human sciences including artistic methods. SMC also includes various research goals and approaches that deal with cross-modality, such as the relationship between perception and action and the integration of different senses involved in human-machine interaction (hearing, vision, movement, haptics, etc.), both in individual and social contexts, or in the relationship between practice and analysis.

Scientific, technological and artistic methodologies: the first two refer to empirically-based and modelling-based approaches that draw upon tools for measuring and processing information. *Artistic methodologies* refer to approaches that depart from and/or result in artistic practices. Following the multidisciplinary view mixed methods are encouraged.

Understanding refers to the aim to increase our knowledge of the mechanisms that underlie how people experience sound and music.

Modelling refers to representations of knowledge and information. The resulting models are used both in applications that aim at scientific understanding (e.g. simulation of perceptual processes) and also in applications that aim at practical or experiential understanding (e.g. in sound-aware objects, music information retrieval systems, music production companions and artistic practice).

Production refers to the creative use of algorithms and tools to develop new content in which sound and music are communicated, as in sound environments, interactive artistic works and sonic design or in tools that facilitate creative or scientific work.'

Computational approaches refer to the processing that allows the development of tools linking sonic energy with subjective experience. Computing is the shared practice that connects scientific understanding, development of technological equipment and content-based creation.

The reviewers will primarily select papers that present significant experimental or theoretical results, or that otherwise advance the current knowledge in the field.

See also

[Mauro, D. A., Avanzini, F., Barate, A., Ludovico, L. A., Ntalampiras, S., Dimitrov, S., & Serafin, S. \(2020\). Sixteen years of sound and music computing: A look into the history and trends of the conference and community. In 17th Sound and Music Computing Conference, SMC 2020 \(pp. 3-10\).](#)
[Axea sas/SMC Network.](#)

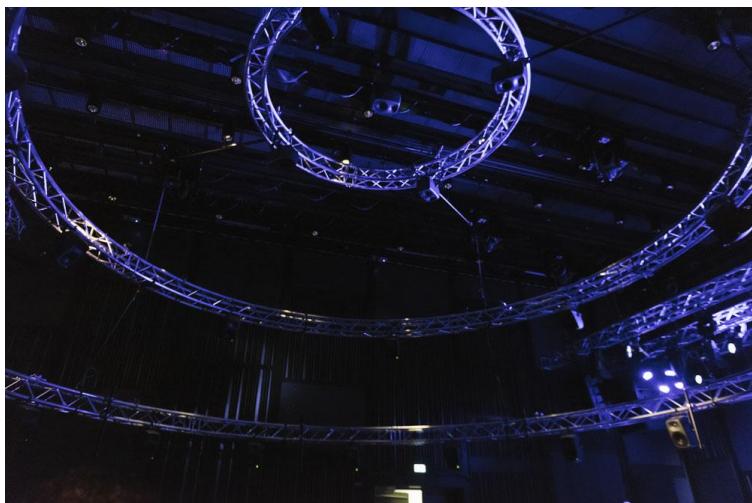
Call for music

SMC 2023 welcomes musical contributions that are related to the core topics in Sound and Music Computing research.

Concerts and performances during SMC 2023 will be programmed on one of the following four sites at the Royal college of Music (KMH):

1. Klangkupolen - a 29.4 speaker dome

Concert space, for works with a focus on spatialisation. Fixed media works and live performances. [Speakermap can be found here.](#)



2. Nathan Mielstein - chamber music hall (stereo)

Live performances, video works, fixed media works.



3. The Balcony - 12 speakers in the foyer of KMH

Works for the balcony may be played several times during the conference and are played on speakers positioned on the balconies (to the right in the picture below) of the foyer of KMH, three rows of four speakers.

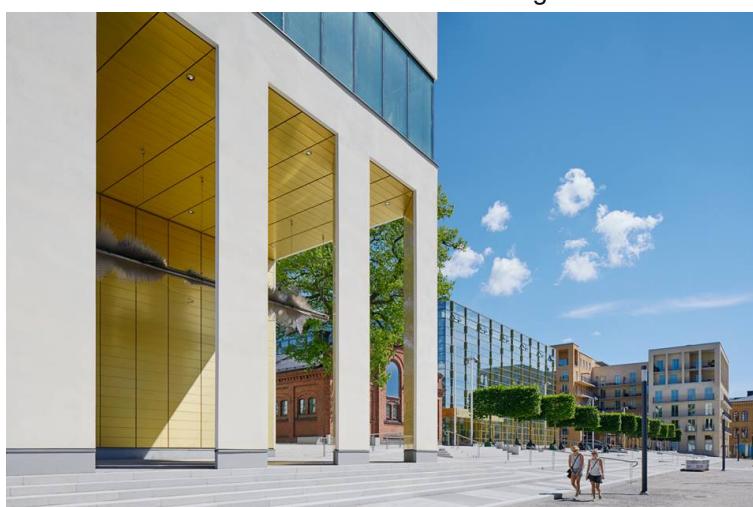


4. The listening room - a playlist for headphones

A playlist will be set up where listeners can choose to listen to any piece programmed in all of the concerts, but also additional works will be added here. Any sound work that relates to a presentation may be submitted here. The playlist will be accessible on a 'headphone stage'.

5. Other

A limited number of submissions for contexts other than these may be accepted, including outdoors installations in the areas surrounding KMH.



Works for multichannel audio should preferably be submitted in a binaural version. Works longer than 12' will be less likely to be programmed, except for the Balcony. All performances should be in place unless online performance is part of the identity of the work.