

8TH SOUND AND MUSIC
COMPUTING
CONFERENCE

Creativity rethinks science

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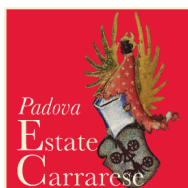


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8th Sound and Music Computing Conference
“Creativity rethinks science”

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The SMC Conference is a privileged forum for international exchanges around the core interdisciplinary topics of Sound and Music Computing.

The SMC initiative is jointly supervised by the following European associations:

- **AFIM** (Association Française d’Informatique Musicale)
- **AIMI** (Associazione Italiana di Informatica Musicale)
- **DEGEM** (Deutsche Gesellschaft für Elektroakustische Musik)
- **HACI** (Hellenic Association of Music Informatics)
- **SITEMU** (Sociedad(e) Ibérica de Tecnología MUtical)

Chapter cover photo credit

A musical instrument in Music 5 on a IBM System 370 Model 158, the first computer used at the Center of Computational Sonology (CSC) to synthesize sound and voice (University of Padova, ca. 1975). The three screenshots show the general scheme of the CSC HW/SW system, a frequency modulation block scheme and a sound spectrum.

INTRODUCTION

Dear fellow SMC Researchers,

I am glad to welcome you to the the 8th edition of the Sound and Music Computing Conference in Padova, and to present the Book of Proceedings of the Technical Program.

When in 2009 we applied for hosting SMC2011, we were driven by two main motivations. First, we wanted to contribute to the growth of our Conference. SMC was born in 2004 from a joint effort by the Italian and French Music Informatics Associations and is still a young event. In a few years its international dimension has grown considerably, thanks to the involvement of other national Music Informatics Associations, and through the establishment of a permanent Steering Committee. The quality of scientific contributions has also improved steadily, thanks to the efforts of previous Organizers.

Over the years, SMC has defined its own identity: a compact and selective conference, which aims at representing the whole spectrum of Sound and Music Computing research, looks for participation especially from young and emerging researchers, believes in interdisciplinary exchanges, grants open access to its contents.

One of the milestones in the evolution of the SMC format has been the convergence between the Conference and the Summer School. The SMC Summer School was born in 2005 as an outcome of the EU Project S2S² (Sound-to Sense, Sense-to-Sound), which also originated the SMC Research Roadmap and the smcnetwork.org portal. Starting with the 2009 edition in Porto, the Summer School takes place just before the Conference, with about 20 PhD students and young researchers attending lectures and hands-on projects. Following the decision taken by the SMC Steering Committee at the beginning of 2011, this is now the official format of SMC.

This year the Summer School focus is around the topic of interaction and embodiment in sound and music. Complementing the Summer School, and marking the beginning of the Conference, the “SMC-Rencon” Workshop is a special event of this year's SMC. Rencon is a contest for computer systems generating expressive musical performances, which are subjectively evaluated by the attending audience. Evaluation by contests, where various systems gather and compete against one another, stimulates scientific progress. Rencon was started in 2002 from this perspective: each edition hosts a competition where systems have to generate performances of newly created musical pieces on site. With this year's edition, Rencon takes place for the second time in Europe, and for the first time in Italy.

The Technical Program of the Conference itself comprises 79 contributions, selected among 136 submissions. We did our best to set up a rigorous and fair peer-review process: thanks to the work of 20 members of the Technical Program Committee, and about 130 reviewers, each submission received no less than 3 independent reviews. Accepted papers are published under a Creative Commons license and are available on smcnetwork.org. Scientific (and music) submissions were sent from 37 countries and 5 continents, which shows that our conference is no longer a EU-centered event and is becoming a worldwide reference.

The general theme of SMC2011 is “Creativity Rethinks Science”. Creativity is at the core of progress and innovation mechanisms, and SMC is a discipline where several existing unconventional creative environments are found, where research and art already collaborate in a productive way injecting new ideas and concepts in both fields. These provide a fertile ground to analyze and try to understand artistic thinking as a driver of innovation, the relationship between artistic and scientific methodologies, and the processes that lead to successful artistic and/or scientific results.

We believe that this general theme applies transversally to all the conference topics. We are very pleased to have philosopher Roberto Casati as our Keynote Speaker. Being an outsider of our community, he will provide the audience with inspiring ideas, addressing this theme from a different angle.

I started this Introduction by mentioning two motivations in our candidacy to SMC2011. The second one is that we wanted to celebrate SaMPL, the Sound and Music Processing Lab created by the Conservatory and the University in 2009. Electronic and computer music research in Padova has a longstanding tradition that dates back to the 1960s, with the pioneering research by Prof. Giovanni Battista Debiasi on electronic organs, and with the electronic music school founded by Teresa Rampazzi. This fertile ground led in 1979 to the establishment of the Center of Computational Sonology (CSC). Thirty years later, SaMPL aims at becoming part of this history.

Federico Avanzini
General Chair SMC2011