

# Foreword

## Welcome to DAFx-14

It is our great pleasure to welcome you to the 17th International Conference on Digital Audio Effects, held 01.09.–05.09.2014 in Erlangen, Germany. Playing a leading role in the development and market introduction of today’s audio codecs, Erlangen has a long history in perceptual audio coding and general audio engineering. Since the late 1970s, the Fraunhofer Institute for Integrated Circuits (IIS) and the Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) both have continuously contributed to audio engineering with cutting-edge research and are still shaping the future of audio and multimedia. The fruitful collaboration between IIS and FAU is also reflected by the joint organization of this year’s edition of the DAFx conference. We are deeply honoured of having the opportunity to host this event at our institutions.

DAFx-14 has a five day programme full of interesting scientific events. The first part of the conference (01.09.–02.09.2014), which takes place at the IIS (Tennenlohe), mainly consists of tutorials, demos, and poster presentations. In particular, we have three tutorials on “Multipitch Analysis of Music Signals” by Anssi Klapuri, on “Audio Structure Analysis of Music” by Meinard Müller, and “Perceptual Audio Coding” by Jürgen Herre, Sascha Disch, and Bernd Edler. The second part of the conference (03.09.–05.09.2014) is held at the FAU campus (Südgelände Technische Fakultät H11) and comprises the oral presentations and further poster presentations of the peer-reviewed scientific contributions.

The DAFx program also features three distinguished keynote speakers, who give their talks on Tuesday, Thursday, and Friday. The first keynote with the title “Improving Time-Frequency Upmix through Time-Domain Processing” is given by Christof Faller, who is managing director at Illusonic and teaching at the Swiss Federal Institute of Technology (EPFL) in Lausanne. The second keynote by Geoffroy Peeters from the Institut de Recherche et Coordination Acoustique/Musique (IRCAM) in Paris addresses the topic of audio indexing for music analysis and music creativity. The third keynote by Christian Hoyer, who is the head of the Bubenreutheum museum association, will explain the historic roots of Frankonian world-class musical instrument building in the Erlangen region and, alongside, point out a quite surprising relation between the Beatles and Erlangen.

The present volume of the proceedings of DAFx-14 contains the complete manuscripts of all peer-reviewed papers presented at the conference. A total of 63 papers entered the review process, out of which 44 contributions were selected for the scientific programme. The mode of presentation was determined after the accept/reject decision and has no relation to the quality of the papers. From the 44 papers, 23 papers were chosen for oral presentation (organized in

six sessions), whereas 21 papers were chosen for poster presentation (organized in two sessions). Oral presentations have a 20-minute slot (including setup and questions/answers of the audience), whereas the posters are presented in a 90-minute poster session as well as during coffee breaks. Furthermore, poster presenters have the opportunity (in two minutes and two slides) to announce orally their poster during two “Fast Forward” sessions.

Besides the scientific programme, we also prepared several social events in the evenings, including a welcome reception on Monday, a concert & reception on Tuesday, a conference banquet with music on Wednesday, as well as a visit to Nuremberg on Thursday.

We are very proud to present to you the proceedings of DAFx-14. The conference program was made possible thanks to the hard work of many people including the members of the local organization team, the reviewers from the DAFx-14 programme committee and the DAFx board members. Special thanks go to this year’s sponsors - Dolby Germany GmbH, iZotope Inc., Native Instruments GmbH and Soundtoys Inc. - and also to the supporting institutions - the Fraunhofer Institut Integrated Circuits (IIS), the Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) and the International Audio Laboratories Erlangen (AudioLabs). Last, but not least, the DAFx-14 programme is possible only thanks to the excellent contributions of our community in response to our call for participation. The biggest acknowledgment therefore goes to you, the authors, researchers and participants of this conference.

The DAFx-14 Conference Committee

Sascha Disch (Fraunhofer IIS, General Chair)  
Jürgen Herre (FAU, AudioLabs, General Chair)  
Rudolf Rabenstein (FAU, LMS, General Chair)  
Bernd Edler (FAU, AudioLabs, Scientific Coordinator)  
Meinard Müller (FAU, AudioLabs, Scientific Coordinator)  
Stefan Turowski (FAU, AudioLabs, Technical Coordinator)