

Foreword

Welcome to DAFx-15 in Trondheim

It is with great pleasure that we welcome you to the 18th International Conference on Digital Audio Effects in Trondheim, Norway from Monday November 30 to Thursday December 3 2015. For the first time the DAFx conference series revisits a host city, 16 years after Trondheim hosted the 2nd DAFx conference in 1999 at the Norwegian University of Science and Technology (NTNU), organized primarily by the Department of Electronics and Telecommunications. Since then the Department of Music has established an ambitious Music Technology group and the two departments are jointly hosting this year's edition of the DAFx conference. We hope that you will sense an inspiring mix of music and audio technology in the program that we present.

DAFx-15 offers four days of scientific program intermingled with concerts and social events. The bulk of the conference consists of 61 papers selected for presentation Tuesday through Thursday: 31 oral presentations and 30 poster presentations. We have organized the oral presentations in 11 sessions, covering topics such as virtual analog, sound synthesis, audio analysis, physical modelling, spatial audio, audio coding, speech applications and audio effects. The posters are deliberately not organized into topics to favor exchanges between scientists of the same field of research. There are 10 poster presentations each day, including two short announcement sessions in the auditorium.

We wanted the conference to reflect how advances in audio technology finds application in music performance and specifically asked for contributions related to real-time applications of digital audio processing. This theme have not made a strong impact on the contributed papers, but we have strengthened it through keynotes and tutorials. We have invited three distinguished keynote speakers to kick off each conference day with an inspiring talk. On Tuesday, the merited artist and researcher Marije Baalman will discuss digital audio as open source hardware and software in a performance context, and she will return as performer at the evening concert. On Wednesday, the brilliant young researcher Kurt Wegner will present status quo on wave digital audio effects at CCRMA in a keynote prepared with Julius Smith. Finally, Dr Franz Zotter from IEM, Graz, and chair of a prize-winning initiative on virtual acoustics within the German acoustical society, will present a keynote on Ambisonics audio effects on Thursday.

Three tutorials launches the conference on Monday. Peter Svensson, professor of electroacoustics at NTNU, starts with a tutorial on "Sound field modeling for virtual acoustics". Professors Øyvind Brandtsegg and Trond Engum will follow with a tutorial/musical demonstration of "Cross-adaptive effects and real-time creative use" together with invited musicians. The third tutorial will be given by Xavier Serra who will present the AudioCommons initiative that "aims at bringing Creative Commons audio content to the creative industries".

There will be several musical contributions during the conference, but the main concert event is held on Tuesday evening at Rockheim, the national museum of popular music. The social program also includes a welcome reception on Monday evening, right next to Nidaros cathedral, Norway's national sanctuary and it concludes with a conference dinner on Wednesday at the idyllic Ringve Museum, the national music museum.

We are proud to present to you the proceedings of DAFx-15. From this year on the publication is registered as an annual serial publication with an ISSN number. We hope this will make it even more attractive to contribute to future DAFx conferences. We have to thank all the great people that helped us make this year's conference happen, including the local organization team, all the reviewers from the DAFx-15 programme committee and the DAFx board members. Warm thanks go

to the organizers of DAFx-13 and DAFx-14, who have been very helpful and responsive to our questions along the way. We would also like to extend our thanks to this year's sponsors: Native Instruments GmbH, Audiokinetic Inc., Soundtoys Inc., Ableton AG and Aalberg Audio AS, and to our supportive institution, Norwegian University of Science and Technology (NTNU).

But most of all we would like to thank the DAFx community who makes these conferences possible by contributing great scientific work and enlightened discussions whenever we meet. We hope that DAFx-15 can play a similar role as earlier conferences in stimulating progress in the field of digital audio.

When we presented our idea of DAFx-15 last year, we promised cold, darkness and snow. As we write these words, the first snow is falling heavily in the cold winter dark, so we will most likely keep our promise. Now it is all up to you, researchers, authors and participants at DAFx-15 to make this a memorable conference!

Welcome to Trondheim!

The DAFx-15 conference committee:

Sigurd Saue (Music Technology): General Chair

Jan Tro (Electronics and Telecommunications): Vice Chair, Social program

Peter Svensson (Electronics and Telecommunications): Program Chair

Ulf Kristiansen (Electronics and Telecommunications): Program Co-chair

Øyvind Brandtsegg (Music Technology): Concerts Coordinator

Tim Cato Netland (Electronics and Telecommunications): Technical Coordinator