

# Chairs' Welcome

It is our great pleasure to welcome you to FARM 2017, the 5th ACM SIGPLAN International Workshop on Functional Art, Music, Modelling and Design!

The ACM SIGPLAN International Workshop on Functional Art, Music, Modelling and Design (FARM) gathers together people who are harnessing functional techniques in the pursuit of creativity and expression.

Functional Programming has emerged as a mainstream software development paradigm, and its artistic and creative use is booming. A growing number of software toolkits, frameworks and environments for art, music and design now employ functional programming languages and techniques. FARM is a forum for exploration and critical evaluation of these developments, for example to consider potential benefits of greater consistency, tersity, and closer mapping to a problem domain.

By gathering researchers, practitioners, artists, designers and anyone interested, FARM aims to develop this interdisciplinary field. Work in this challenging area has already led to new language designs, abstraction techniques, and execution models, as well as the use of old ideas in new, novel, and surprising ways.

After its first edition held in Boston in 2013, its second edition held in Gothenburg in 2014, the third in Vancouver 2015, and the fourth in Nara in 2016, this year's FARM will take place in Oxford, UK on September 9.

As has become the norm, FARM 2017 is dominated by contributions on computer music: Halley Young presents a categorical grammar for music. Edward Lilley also presents a new representation for music notation. Chris Ford will talk about representing African polyphony and polyrhythm. Yann Orlarey, Stéphane Letz, Dominique Foer, and Romain Michon present the FAUST DSL for real-time signal processing and synthesis. Thomas Murphy will present a sound-synthesis system in Haskell based on SuperCollider.

However, not all is music at the 2017 FARM: A representation for mathematics, presented by Joseph Corneli, Raymond Puzio, Ursula Martin, Dave Murray-Rust, Alison Pease, and Gabriela Rino Nesin breaks new ground for FARM. Simon Archipoff and David Janin present their approach for unified media programming, accompanied by a demo of a 3D animation language. Ivan Perez presents a graphic adventure library and engine. Finally, Stian Veum Møllersen describes Ait, a concatenative language for creative programming.

In 2014, 2015, and 2016 FARM also organized an evening of performances on the last day of ICFP. This year continues what is becoming a tradition, with a line-up of exciting computer-music performances assembled by Alex McLean, headlined by Alexandra Cárdenas.

Further information about FARM is available on our website, [functional-art.org](http://functional-art.org).

We would like to thank ACM and the organizers of ICFP 2017 for their support, especially general chair Jeremy Gibbons as well as the workshop chairs, David Christiansen and Andres Löb. Thanks also to the members of the FARM Program Committee, and to everyone who submitted papers, demos, and performance proposals. And, of course, we are grateful to all of the participants. We hope that you will enjoy the workshop as much as we know we will.

Welcome to the FARM!

**Michael Sperber**  
Workshop Chair  
Active Group GmbH

**Jean Bresson**  
Program Committee Chair  
IRCAM

**Alex McLean**  
Performance Chair  
Deutsches Museum, Munich

**Mark Santolucito**  
Publicity Chair  
Yale University

# FARM 2017 Workshop Organization

**Workshop Chair:** Michael Sperber (*Active Group GmbH*)

**Program Chair:** Jean Bresson (*UMR STMS IRCAM/CNRS/UPMC Sorbonne Universités*)

**Performance Chair:** Alex McLean (*Deutsches Museum, Munich*)

**Publicity Chair:** Mark Santolucito (*Yale University*)

**Program Committee:** Renick Bell (*Tama Art University, Tokyo*)  
Beatrice Berard, LIP6 (*Universite Pierre et Marie Curie*)  
Jean Bresson (*UMR STMS IRCAM/CNRS/UPMC Sorbonne Universités*)  
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José Pedro Magalhães (*Standard Chartered Bank*)  
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Christophe Rhodes (*Goldsmiths, University of London*)  
Andrew Sorensen (*Australian National University*)  
Michael Sperber (*Active Group GmbH*)  
Charlotte Truchet (*LINA, UMR 6241, Université de Nantes*)