



Call for Papers and Musical Compositions

Workshop on Music and Artificial Life part of ECAL 2007

10 September 2007, Belem Cultural Centre, Lisbon, Portugal

<http://cmr.soc.plymouth.ac.uk/Musical2007/>

The Artificial Life approach to music is an exciting new development for composers and researchers. In both cases, the musical evolution can be influenced by a variety of constraints and tendencies built into the system, such as realistic psychological factors that influence the way that music is experienced, learned, stored, modified, and passed on between individuals. Realistic Artificial Life models of music require sophisticated techniques for the implementation of such constraints and tendencies, which involves an interdisciplinary understanding of music from different points of view, ranging from neuroscience and psychology, to computing and musicology.

This workshop will focus on the applications of Artificial Life to music and the tools needed to create and study such systems. These tools are mostly drawn from research into the origins and evolution of biological organisms, ecologies, and cultural systems on the one hand, and in part from A-life computer modelling methodologies on the other.

The goal of this workshop is to bring together a multidisciplinary core of musicians and scientists who are working at the crossroads of A-life and music, to provide a common ground for dialog and interaction, to highlight the latest advances, and to discuss the main directions for the future. In addition to scientific and technical standard research papers, composers and practitioners are encouraged to submit papers reporting practical applications of Alife to music; e.g., discussing a musical composition using Alife.

Given the wide range of topics, authors should make sure their papers are contextualized in the field of A-life and music so as indicate how the proposed A-life approach to the problem in question is contributing to music or how the music approach is contributing to A-life.

Topics of the workshop include (but not limited to):

- Composition and Performance
- Computational Biomusicology
- Computational Neuromusicology
- Emergent Musical Behaviour
- Modelling Techniques (GA, Cellular Automata, Neural Nets, Swarms)
- Musical Creativity
- Origins and Evolution of Music
- Unconventional Computing for Music (Analog, Bio, Chemical Computing)
- Signal Processing (Audio and Music)
- Sound-based Communication Systems in Animals and Animats
- Sound Synthesis
- Sensors and Actuators (for A-life music models)

Paper submission

All workshop papers will be reviewed by a minimum of two members of the scientific programme committee. Submissions (preferably in PDF format) should be sent by email to:

qijun.zhang AT plymouth.ac.uk

with a Cc to eduardo.miranda AT plymouth.ac.uk

The submissions should be full papers (not abstracts), following the Springer LNCS format, with a maximum page length of 12 pages. Authors should remain anonymous, as the review process will be **double-blind review**. An attempt should be made to conceal any self-referencing that would identify the authorship.

Musical compositions for the MusicAL concert

The Workshop on Music and A-Life concert will be at the “Instituto Franco-Portugues” in the evening of 12 September. The MusicAL concert will open the prestigious **Musica Viva Festival**, which continues after the ECAL. This is a wonderful excuse to stay in Lisbon for a few additional days.

The Musica Viva Festival is an international contemporary music festival organised by Miso Music Portugal. More details of the festival will be available at Miso’s website in due time:

<http://www.misomusic.com/>

The sound projection system for this concert will be the Miso Loudspeaker Orchestra. The system comprises 60 loudspeakers, divided into 6 different sub-systems, placed all round the concert hall, distributed both horizontally and

vertically, in order to provide a wide range of sound planes and perspectives. Composers will have the opportunity to rehearse the sound diffusion of their pieces on the day before the concert. More information about the Miso Loudspeaker Orchestra is available here:

<http://www.misomusic.com/ingl/research/ol.html>

Please contact Joao Martins for further enquiries on the concert and submissions: joao.martins@plymouth.ac.uk or tel: +44 (0)1752 232579.

Important Dates - for PAPERS

- * Submission deadline: 09 March 2007
- * Notification date: 13 April 2007
- * Final date for camera-ready copies to organizers: 04 May 2007

Please note that our deadlines are earlier than the main ECAL deadlines.

Important Dates - for MUSIC

- * Submission deadline: 04 June 2007
- * Notification date: 16 July 2007

Organising committee

Eduardo R Miranda (Chair, University of Plymouth, UK)
Joao Martins (University of Plymouth, UK)
Qijun Zhang (University of Plymouth, UK)

Scientific and Programme Committee

Amilcar Cardoso (University of Coimbra, Portugal)
Andrew Brown (Queensland University of Technology, Australia)
Andrew Horner (The Hong Kong University of Science & Technology, China)
Christopher Ariza (Towson University, USA)
John Al Biles (Rochester Institute of Technology, USA)
John Matthias (University of Plymouth, UK)
Jon McCormack (Monash University, Australia)
Geraint Wiggins (Goldsmiths College University of London, UK)
Larry Bull (University of the West of England, UK)
Marc Leman (Ghent University, Belgium)
Mitchell Whitelaw (University of Canberra, Australia)
Palle Dahlstedt (University of Göteborg, Sweden)
Peter Bentley (University College London, UK)
Tim Blackwell (Goldsmiths College University of London, UK)

All selected papers will be published in the proceedings of ECAL 07 workshops, as a CD-ROM, which will be distributed to all delegates of the conference on arrival. In addition to the CD-ROM proceedings:

a) Up to 2 papers will be recommended by the programme committee for publication in *Leonardo Music Journal*, Vol. 18, on the theme "Why Live? Performance in the Age of Digital Reproduction". This issue of LMJ is due for publication in December 2008. Therefore, authors will have the chance to produce an updated version of the recommended papers.

b) Authors of all selected papers will be invited to publish a book-chapter version of the paper in a book entitled *Sounds of Artificial Life: Breeding Music with Digital Biology*, to be published after the workshop. More details on this publication opportunity will be provided with the notification of the results of the reviewing process.

Format of the workshop

Each speaker would be given 30 minutes to present his/her work including 5 minutes for discussion. The last hour of the workshop will be assigned for a concluding discussion on the future of the field. This will be an interactive session for open group discussion.

**FOR UPDATED INFORMATION AND INSTRUCTIONS FOR ALL
SUBMISSIONS, PLEASE REFER TO**

<http://cmr.soc.plymouth.ac.uk/Musical2007/>