



Eurographics 2003

Slides & Video

Ronan Boulic and Vicente del Sol (Editors)

Published by
The Eurographics Association
ISSN: 1017-4656

The European Association for Computer Graphics
24th Annual Conference

EUROGRAPHICS 2003

Granada, Spain
September 1-6, 2003

Organized by



EUROGRAPHICS
THE EUROPEAN ASSOCIATION
FOR COMPUTER GRAPHICS



Dept. Lenguajes y
Sistemas Informáticos,
Universidad de Granada



Universidad de Granada
Spain

International Programme Committee Co-Chairs

Pere Brunet (Spain)
Dieter Fellner (Germany)

Conference Co-Chairs

David Duce (UK)
Juan Carlos Torres (Spain)

Tutorial Chairs

Roger Hubbard (UK)
Carlos Ureña (Spain)
Alvar Vinacua (Spain)

Education Chairs

Steve Cunningham (USA)
Domingo Martín (Spain)

John Lansdown Award Chairs

David Duke (UK)
Miguel Lastra (Spain)

Slides and Animations Chairs

Vicente del Sol (Spain)
Ronan Boulic (Switzerland)

Sponsorship & Promotion

Francisco Feito (Spain)
Ricardo Quiros (Spain)
Miguel Gea (Spain)

STAR Report Chairs

Claudio Montani (Italy)
Xavier Pueyo (Spain)

Short Presentations Chairs

Miguel Chover (Spain)
Hans Hagen (Germany)
Daniela Tost (Spain)

Interactive Demos and Poster Presentation Chairs

Julián Flores (Spain)
Pedro Cano (Spain)

Industrial Seminar and Project Presentations Chairs

Francisco Serón (Spain)
Felipe Lozano (Spain)

Medical Prize Chair

Nigel W. John (UK)

Conference Secretariat

Francisco Velasco (Spain)

Webmaster

Jorge Revelles (Spain)

Preface

Among the wide offer of sessions within the Eurographics'03 conference, the Slides and Video show aims at providing a continuous presentation of up to date scientific and artistic researches. The selected pieces for the show run as self-contained video or slides all along the conference duration.

Regarding the second submission type, the term *slide* has unfortunately often been confused with the slides that are presented at a paper session. Instead, a slide is a high quality image with undeniable artistic value, typically like the cover image of Computer Graphics Forum. Due to our failure to make this definition clear enough there is no slide this year but we are confident that there is ample material in the scientific and artistic communities for the next venue. A second characteristic of the present session is its large majority of scientific contributions; we analyse it as representative of the Eurographics conference with its strong scientific focus.

The call for paper insisted on stressing the *end user perspective* both for the production of the submitted pieces and for the potential of the described techniques in mainstream applications. This focus has resulted in the specific format of the accompanying papers gathered in the present proceedings.

The topics tackled by the selected contributions address a wide range of problems:

- The transformation of complex mathematical surfaces.
- Multiple real-time issues: in the simulation of flexible materials, mesh simplification and rendering, obscurance recomputation.
- The simulation of natural phenomena: lava flow or the sound of wind in trees.
- Some production-oriented tools: lip synching, motion editing

We are very grateful to the members of the selection committee who had the difficult task of evaluating the submissions within a very short time frame and on a reduced image format. Due to its novelty too, we wish to gather additional feedback from anybody interested in this type of session to make it a rewarding experience for both contributors and viewers of the show. We are convinced that there is a great potential for its future venues.

Ronan Boulic
Swiss Federal Institute of Technology
Lausanne

Vincente del Sol
University of Granada

September 2003

International Slides and Video Programme Committee

Ronan Boulic	Switzerland
Vicente del Sol	Spain

Kadi Bouatouch	France
Mireille Clavien	Switzerland
Sergio García	Spain
Miquel Mascaró-Oliver	Spain
Daniel Thalmann	Switzerland

Author Index

Bay, H.....	9	Langer, M.....	31	Pajarola, R.	5
Boulic, R.....	9	Le Callennec, B.....	9	Sbert, M.	19
Catà, J.....	19	Matsuyama, K.....	1	Shafae, M.....	5
Chiba, N.	1, 35	Méndez, À.....	19	Tamura, M.	1, 35
Davis, T.A.	15	Muraoka, K.	1, 35		
Fujimoto, T.....	1, 35	Nikitin, I.....	25		
Herren, M.	3	Nikitina, L.	25		
Johnson, R.	15	Oda, Y.....	35		
Klimenko, S.....	25	Ota, S.....	1, 35		

Table of Contents

Slides & Video

<i>Animating Tree Movement with Sound Effects Generation</i>	1
K. Matsuyama, S. Ota, M. Tamura, T. Fujimoto, K. Muraoka, N. Chiba	
<i>DStrips: Dynamic Triangle Strips for Real-Time Mesh Simplification and Rendering</i> ..	5
M. Shafae, R. Pajarola	
<i>Experimenting Prioritized IK for Motion Editing</i>	9
R. Boulic, B. Le Calennec, M. Herren, H. Bay	
<i>Lip-Synching in Sourdough</i>	15
T. A. Davis, R. Johnson	
<i>Real-time Obscurances with Color Bleeding (the three cubes demo)</i>	19
À. Méndez, M. Sbert, J. Catà	
<i>Real-Time Simulation of Flexible Materials in Avango Virtual Environment Framework</i>	25
S. Klimenko, L. Nikitina, I. Nikitin	
<i>Transformation of a Boy,s Surface into a Steiner’s Surface and torus eversion</i>	31
M. Langer	
<i>Visual Simulation of Lava Flows Employing Particle-based Approach</i>	35
Y. Oda, S. Ota, M. Tamura, T. Fujimoto, K. Muraoka, N. Chiba	

