



# SPRING CONFERENCE ON COMPUTER GRAPHICS

Smolenice, May 28-30, 2014

Conference Chairman: Diego Gutierrez

## SCCG 2014 - Conference Programme

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**WEDNESDAY, May 28, 2014**

Travel and Lunch

### CONFERENCE OPENING

14.00 INVITATION MOVIE

The Dean of the Faculty of Mathematics,  
Physics and Informatics

**Prof. RNDr. Jozef MASARIK, DrSc.**

SCCG 2014 Conference Chairman

**Prof. Diego Gutierrez**

### \*\*\*\* SCIENTIFIC PROGRAMME \*\*\*\*

**KEYNOTE TALK** (chair: \*)

**14:30** *Computation and Perception: Building  
Better Displays*

**Prof. Diego Gutierrez**

**Universidad de Zaragoza, Spain**

15:30 COFFEE BREAK

### VISUALIZATION, NATURAL PHENOMENA (chair: \*)

**16:00** *Rapid Modelling of Interactive Geological  
Illustrations with Faults and Compaction*

**Mattia Natali, Julius Parulek, Daniel  
Patel**

**16:25** *Live ultrasound-based particle visualization  
of blood flow in the heart*

**Paolo Angelelli, Sten Roar Snare, Siri  
Ann Nyernes, Stefan Bruckner, Helwig  
Hauser, Lasse Løvstakken**

**16:50** *A Survey of Direction-Preserving Layout  
Strategies*

**Martin Steiger, Jürgen Bernard,  
Thorsen May, Jörn Kohlhammer**

### POSTER SESSION (chair: \*)

**17:15** Fast Forward Poster Presentations

**17:45** Poster Session

### \*\*\*\* SOCIAL PROGRAMME \*\*\*\*

**19:30 WELCOME PARTY**

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**THURSDAY, May 29, 2014**

8:00 BREAKFAST

**\*\*\*\* SCIENTIFIC PROGRAMME \*\*\*\***

**RENDERING** (chair: \*)

**9:25** *Bounding Volume Hierarchies versus Kd-trees on Contemporary Many-Core Architectures*

**Marek Vinkler, Vlastimil Havran, Jiří Bittner**

**9:50** *Adaptive BVH: An Evaluation of an Efficient Shared Data Structure for Interactive Simulation*

**Colin Fowler, Michael J. Doyle, Michael Manzke**

10:15 COFFEE BREAK

**INVITED TALK** (chair: \*)

**10:45** *Image Space Filtering for Monte Carlo Rendering: A Small Price to Pay for Much Less Noise*

**Matthias Zwicker**  
**University of Bern, Switzerland**

12:00 LUNCH

**COMPUTER VISION**

(chair: \*)

**13:00** *Multiple instances object detection*

**Zuzana Haladová, Elena Šikudová**

**13:25** *Kinect-Supported Dataset Creation for Human Pose Estimation*

**Kamil Behúň, Adam Herout, Alexander Páldy**

**13:50** *Hybrid Color Model for Image Retrieval Based on Fuzzy Histograms*

**Vedran Ljubovic, Haris Supic**

**INVITED TALK** (chair: \*)

**14:30** *High-Quality Passive Facial Performance Capture and its Applications*

**Thabo Beeler**  
**Disney Research Zürich, Switzerland**

15:30 COFFEE BREAK

**APPLICATIONS** (chair: \*)

**16:00** *Cheap Rendering vs. Costly Annotation: Rendered Omnidirectional Dataset of Vehicles*

**Peter Šlosár, Roman Juránek, Adam Herout**

**16:25** *Sampling Gabor Noise in the Spatial Domain*

**Victor Charpenay, Bernhard Steiner, Przemyslaw Musialski**

**INVITED PAPERS** (chair: \*)

**17:00** *Computational Photography: Coding in Space and Time*

**Belen Masia**

**17:35** *History of SCCG*

**Andrej Ferko, Eugen Ružický**

\*\*\*\* **SOCIAL PROGRAMME** \*\*\*\*

19:00 DINNER/BARBECUE SESSION

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**FRIDAY, May 30, 2014**

**8:00 BREAKFAST**

\*\*\*\* **SCIENTIFIC PROGRAMME** \*\*\*\*

**ANIMATION** (chair: \*)

**9:00** *Position Based Skinning of Skeleton-driven Deformable Characters*

**Nadine Abu Rumman, Marco Fratarcangeli**

**9:25** *Skeleton-based Matching for Animation Transfer and Joint Detection*

**Martin Madaras, Michal Piovarči, Jana Běhal Dadová, Roman Franta, Tomáš Kovačovský**

**9:50** *Evaluating the Covariance Matrix Constraints for Data-Driven Statistical Human Motion Reconstruction*

**Christos Mousas, Paul Newbury, Christos-Nikolaos Anagnostopoulos**

10:15 COFFEE BREAK

**INVITED TALK** (chair: \*)

**10:45** *Modeling and representing materials in the wild*

**Kavita Bala**  
**Cornell University, USA**

**11:45 CONFERENCE CLOSING CEREMONY**

12:15 LUNCH

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(\*) to be added

Please, follow the last minute changes at the MESSAGE BOARD in the lobby.

SCCG 2014 Organizing Committee