

### Monday June 23

**09:30 - 10:30: Registration**

**10:30 - 10:45: Opening Remarks**

**10:45 - 12:00: Graphics Systems**

Session Chair: Philipp Slusallek (DFKI/Saarland University)

Streaming G-Buffer Compression for Multi-Sample Anti-Aliasing, *Ethan Kerzner, Marco Salvi*

Coarse Pixel Shading, *Karthik Vaidyanathan, Marco Salvi, Robert Toth, Tim Foley, Tomas Akenine-Möller, Jim Nilsson, Jacob Munkberg, Jon Hasselgren, Masamichi Sugihara, Petrik Clarberg, Tomasz Janczak, Aaron Lefohn*

Register Efficient Memory Allocator for GPUs, *Marek Vinkler, Vlastimil Havran*

**12:00 - 13:30: Lunch**

**13:30 - 14:20: Ray Tracing**

Session Chair: Christophe Hery (Pixar)

Reduced Precision for Hardware Ray Tracing in GPUs, *Sean Keely*

Exploiting Local Orientation Similarity for Efficient Ray Traversal of Hair and Fur, *Sven Woop, Carsten Benthin, Ingo Wald, Gregory S. Johnson, Eric Tabellion*

**14:20 - 14:45: Coffee Break**

**14:45 - 16:00: Hot3D Session 1**

Small Batch Solutions in the Mantle API, *Guennadi Rigueur, AMD*

Bandwidth-efficient Graphics with ARM Mali GPUs, *Marius Bjørge, ARM*

Chrome on Mobile @ 60 FPS, *Sami Kyostila, Google*

**16:00 - 16:15: Coffee Break**

**16:15 - 17:30: Panel Discussion 1**

Title: How Low Should We Go: Implications of the Trend Toward Thinner and Lower-Level Graphics APIs

Moderator: Kayvon Fatahalian, Carnegie Mellon University

Panelists: Cass Everitt, Oculus; Sami Kyostila, Google; Dave McAllister, NVIDIA; Guennadi Rigueur, AMD; and Philipp Slusallek, Saarland University

### Tuesday June 24

**09:00 - 10:00: Keynote Talk: Marcos Fajardo, CEO, Solid Angle**

**10:00 - 10:30: Coffee Break**

**10:30 - 11:45: Image Processing**

Session Chair: Samuli Laine (NVIDIA)

A Fast and Stable Feature-Aware Motion Blur Filter, *Jean-Philippe Guertin, Morgan McGuire, Derek Nowrouzezahrai*

Fast ANN for High-Quality Collaborative Filtering, *Yun-Ta Tsai, Markus Steinberger, Dawid Pająk, Kari Pulli*

SegTC: Fast Texture Compression using Image Segmentation, *Pavel Krajcevski, Dinesh Manocha*

**11:45 - 13:30: Lunch & HPG Town Hall**

**13:30 - 14:45: Hot3D Session 2**

NVIDIA's Tegra K1: Bringing the Complete GPU Experience to Mobile Platforms, *Steve Molnar, NVIDIA*

Oculus DK2 and Latency Mitigation for Virtual Reality, *Cass Everitt, Oculus*

NVIDIA IndeX - GPU-Cluster Aware Software Solution for Interactive Visual Computing of Large-Scale Data, *Christopher Lux, Marc Nienhaus, NVIDIA*

**14:45 - 15:45: Coffee Break & Poster Session**

Improving Ray Traversal for Wide BVHs, *T. Schiffer and D. W. Fellner*

Efficient Ray Generation Scheme for Ray Tracing, *Kyungsu Kim and Jaewoong Lee*

Ray Tracing Irregularly Distributed Samples on Multiple GPUs, *Takahiro Harada, Masahiro Fujita*

LSGL: Large Scale Graphics Library for Peta-Scale Computing Environments, *M. Fujita, J. Nonaka, and K. Ono*

Surface Virtual Point Lights, *Yu-Jung Chen, Chen-Yu Yen, and Shao-Yi Chien*

**15:45 - 17:00: Collisions and Proximity**

Session Chair: Vlastimil Havran (Czech Technical University in Prague)

Out-of-Core Proximity Computation for Particle-based Fluid Simulations, *Duksu Kim, Myung-Bae Son, Young J. Kim, Jeong-Mo Hong, Sungeui Yoon*

Real-Time Deformation of Subdivision Surfaces from Object Collisions, *Henry Schäfer, Benjamin Keinert, Matthias Nießner, Christoph Buchenau, Michael Guthe, Marc Stamminger*

High-performance Delaunay triangulation for many-core computers, *Valentin Fuetterling, Carsten Lojewski, Franz-Josef Pfreundt*

**Evening Banquet**

Please join us at the Château d'Envaux for the High-Performance Graphics banquet.

### Wednesday June 25

**09:00 - 10:15: Rendering**

Session Chair: Anselmo Lastra (University of North Carolina at Chapel Hill)

Interactive Rendering of Giga-Particle Liquid Simulations, *Florian Reichl, Matthäus Chajdas, Jens Schneider, Rüdiger Westermann*

Layered Reflective Shadow Maps for Voxel-based Indirect Illumination, *Masamichi Sugihara, Randall Rauwendaal, Marco Salvi*

High-Performance Rendering of Realistic Cumulus Clouds using Pre-computed Lighting, *Egor Yusov*

**10:15 - 10:45: Coffee Break**

**10:45 - 11:45: Panel Discussion 2**

**11:45 - 12:45: Lunch**

**12:45 - 13:15: Best Paper Presentation & Closing Remarks**

**13:15 - 13:45: Break**

**13:45 - 14:00: EGSR Opening Remarks** HPG attendees are encouraged to attend.

**14:00 - 15:00: Joint HPG/EGSR Keynote Talk: Tomas Akenine-Möller, Lund University**

**Evening: Reception and Tour of the City**

