



EUROGRAPHICS SYMPOSIUM
ON PARALLEL GRAPHICS
AND VISUALIZATION '06

6th Eurographics Symposium on Parallel Graphics and Visualization

Braga, 11-12, May 2006

Symposium Programme

10.May		12.May	
18:00 – 19:30		Welcome Reception (University Restaurant – see map)	
11.May		12.May	
09:00 – 09:30	Opening	09:00 – 09:45	James T. Klosowski The Challenges of Commodity-Based Visualization Clusters
09:30 – 10:15	Alan Chalmers Rendering on Demand	09:45 – 10:35	Session 4 Clusters I
10:15 – 10:45	Coffee Break	10:35 – 11:10	Coffee break
10:45 – 12:30	Session 1 Parallel Rendering and Animation	11:10 – 12:25	Session 5 Clusters II
12:30 – 14:00	Lunch	12:30 – 14:00	Lunch
14:00 – 15:15	Session 2 Volume Rendering	14:00 – 15:15	Session 6 Large Data Visualization
15:15 – 15:45	Coffee break	15:15 – 15:45	Coffee Break
15:45 – 17:25	Session 3 Visualization	15:50 – 17:20	Short Papers
17:30 – 20:00	Guided tour to Guimarães	17:20 – 17:45	Closing
20:00 – 23:00	Conference Dinner		



Universidade do Minho



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FCT Fundação para a Ciência e a Tecnologia

MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR

11, May, 2006

(09:00 – 09:30) – **Opening Session**

(09:30 – 10:15) - **Invited speaker: Dr. Alan Chalmers**

Chair person: Bruno Raffin

Dept. of Computer Science, Bristol University
"Rendering on Demand"

(10:45 – 12:30) - Session 1 – **Parallel Rendering and Animation**

Chair person: Wolfgang Strasser

10:45 - *"An Application of Scalable Massive Model Interaction using Shared-Memory Systems"*
Abe Stephens, Solomon Boulos, James Bigler, Ingo Wald, Steven Parker

11:10 - *"Accelerating the Irradiance Cache through Parallel Component-Based Rendering"*
Kurt Debattista, Luis Paulo Santos, Alan Chalmers

11:35 - *"Parallel Cloth Simulation on Distributed Memory Architectures"*
Bernhard Thomaszewski, Wolfgang Blochinger

12:00 - *"Dynamic load balancing for parallel volume rendering"*
Marchesin Stephane, Catherine Mongenet, Jean-Michel Dischler

(14:00 – 15:15) - Session 2 – **Volume Rendering**

Chair person: Kwan-Liu Ma

14:00 - *"Interactive Volume Rendering of Unstructured Grids with Time-Varying Scalar Fields"*
Steven Callahan, Fabio Bernardon, Joao Comba, Claudio Silva

14:25 - *"Optimized Volume Raycasting for Graphics-Hardware-based Cluster Systems"*
Christoph Muller, Magnus Strengert, Thomas Ertl

14:50 - *"Accelerated Volume Rendering with Homogeneous Region Encoding using EACD on GPU"*
Alphan Es, Hacer Yalim Keles, Veysi Isler

(15:45 – 17:25) - Session 3 – **Visualization**

Chair person: Dirk Bartz

15:45 - *"Parallel Texture-Based Vector Field Visualization on Curved Surfaces Using GPU Cluster Computers"*

Sven Bachthaler, Magnus Strengert, Daniel Weiskopf, Thomas Ertl

16:10 - *"Distributed Force-Directed Graph Layout and Visualization"*
Christopher E. Mueller, Douglas Gregor, Andrew Lumsdaine

16:35 - *"Time Step Prioritising in Parallel Feature Extraction on Unsteady Simulation Data"*
Marc Wolter, Bernd Hentschel, Bernd Hentschel, Andreas Gerndt, Torsten Kuhlen

17:00 - *"Parallelization of Inverse Design of Luminaire Reflectors"*
J.A. Magallon, G. Patow, F.J. Seron, X. Pueyo

(17:30 – 23:00) –

Conference Dinner in Guimarães

Sponsored by



12, May, 2006

(09:00 – 9:45) - **Invited speaker: Dr. James T. Klosowski**

Chair person: Claudio Silva

Visualization Systems, IBM T. J. Watson Research Center
“*The Challenges of Commodity-Based Visualization Clusters*”

(09:45 – 10:35) - Session 4 – **Clusters I**

Chair person: Timothy Newman

9:45 - “*WinSGL: Software Genlocking for Cost-Effective VR Installations under Microsoft Windows*”
Michael Waschbuesch, Daniel Cotting, Markus Gross

10:10 - “*Sorted Pipeline Image Composition*”
Marcus Roth, Dirk Reiners

(11:10 – 12:25) - Session 5 – **Clusters II**

Chair person: Alan Chalmers

11:10 - “*Optimized Visualization for Tiled Displays*”
Mario Lorenz, Guido Brunnett

11:35 - “*Parallel particle rendering: a performance comparison between Chromium and Aura*”
Tom van der Schaaf, Michal Koutek, Henri Bal

12:00 - “*Piggybacking for More Efficient Parallel Out-of-Core Isosurfacing*”
Timothy S. Newman, Wenjun Ma

(14:00 – 15:15) - Session 6 – **Large Data Visualization**

Chair person: Thomas Ertl

14:00 - “*A Scalable, Hybrid Scheme for Volume Rendering Massive Data Sets*”
Hank Childs, Mark Duchaineau, Kwan-Liu Ma

14:25 - “*Remote Large Data Visualization in the ParaView Framework*”
Andrej Cedilnik, Berk Geveci, Kenneth Moreland, James Ahrens, Jean Favre

14:50 - “*Multi-layered Image Caching for Distributed Rendering of Large Multiresolution Datasets*”
Jonathan Strasser, Kwan-Liu Ma

(15:50 – 17:20) - **Short Papers**

Chair person: Tom van der Schaaf

15:50 – “*Pipelined Sort-last Rendering: Scalability, Performance and Beyond*”
Xavier Cavin, Christophe Mion

16:05 – “*A Simple, Distributed Rendering Toolkit*”
Axel Tetzlaff, Christian-A. Bohn

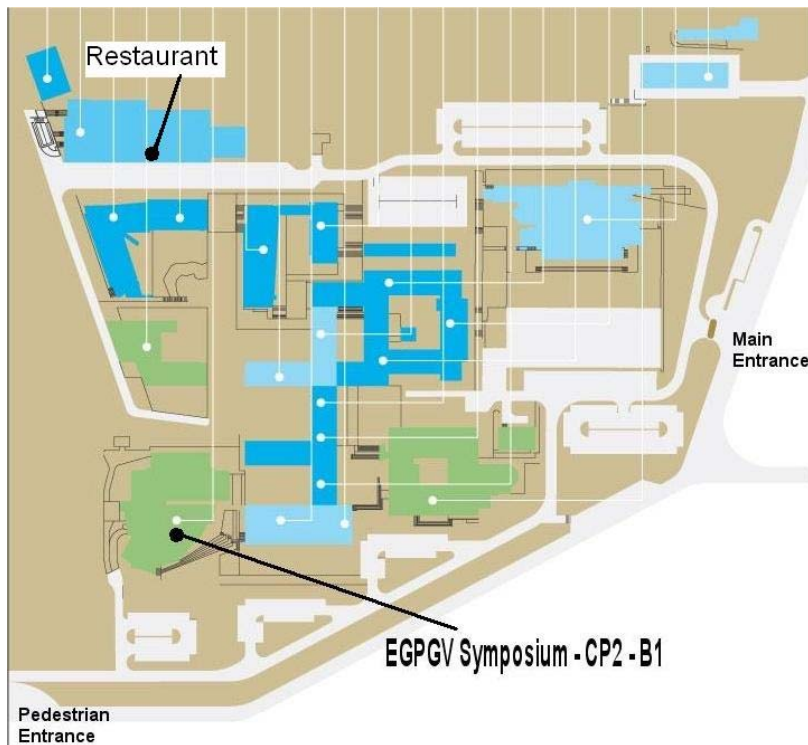
16:20 – “*Hardware for a Ray Tracing Technique Using Plane-Sphere Intersections*”
Y. Kaeriyama, D. Zaitso, K. Komatsu, K. Suzuki, N. Ohba, T. Nakamura

16:35 – “*Accurate Workload Estimation for Fast Parallel RMT*”
Timothy S. Newman, Wenjun Ma

16:50 – “*A Distributed Memory GPU Implementation of the Boris Particle Pusher Algorithm*”
Paulo Abreu, Luis O. Silva, Joao Madeiras Pereira

17:05 – “*3-D Critical Points Computed by Nested OpenMP*”
Andreas Gerndt, Samuel Sarholz

(17:20 – 17:45) – **Closing Session**



Symposium Location:

Auditorium B1-CP2
 Campus de Gualtar
 Universidade do Minho
 Braga, Portugal

Hotels

Hotel Lamações
 Av. D. João II, 75
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Insurance

All symposium participants are covered by an insurance policy, which can be used in case of accident or injury. If such is the case, please:

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- call the Symposium's organization to report your location (+351 96 310 98 15)

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