

Conference Program

Below is the current status of the conference program. A **highlighted name** indicates that this person will present the paper at the conference, move your mouse over the name to see a picture of the speaker. You can also click on the title of a lecture to read its abstract.

Wednesday, October 24 - HAPTEX'07 Workshop

8:00 Reception

8:30 Opening

8:40 **Session 1**

"Integrating Force and Tactile Rendering Into a Single VR System"

Marco Fontana, Simone Marcheschi, Federico Tarri, Fabio Salsedo, Massimo Bergamasco, Dennis Allerkamp, Guido Böttcher, Franz-Erich Wolter, Alan C. Brady, Jianguo Qu and Ian R. Summers

"Subjective fabric evaluation"

Christiane Luible, Minna Varheenmaa, Harriet Meinander and Nadia Magnenat-Thalmann

"Virtual reality systems modelling haptic two-finger contact with deformable physical surfaces"

Guido Böttcher, Dennis Allerkamp and Franz-Erich Wolter

10:10 Coffee Break

10:40 **Session 2**

Invited Lecture: "Getting in Touch with Multisensory Perception"

Marc Ernst

"Accurate Anisotropic Bending Stiffness on Particle Grids"

Pascal Volino and Nadia Magnenat-Thalmann

12:10 Lunch

13:30 **Session 3**

"Generating Tactile Textures using Periodicity Analysis"

Niklas Peinecke, **Dennis Allerkamp** and Franz-Erich Wolter

"Perception of Compliant Environments Through a Visual-Haptic Human System Interface"

Franziska Freyberger and Martin Kuschel

"Experiments of haptic perception techniques for computational fluid dynamics"

Nicolas Fauvet, Mehdi Ammi, Patrick Bourdot

15:00 Coffee Break

15:30 **Session 4**

"Estimation of Hookean Parameters of Deformable Bodies from Real Videos"

Cédric Syllebranque, Samuel Boivin, Christian Duriez and Christophe Chaillou

"MHaptic: a Haptic Manipulation Library for Generic Virtual Environments"

Renaud Ott, Vincent De Perrot, Daniel Thalmann and Frederic Vexo

"An Educational Environment for Chemical Contents with Haptic Interaction"

Jun Murayama, Hiromi Shimizu, Chang S. Nam, Hiroko Satoh and Makoto Sato

17:00 Closing

17:10 End

Thursday, October 25 - Main Conference Day 1

8:00 Reception

8:30 Opening

8:45 **Invited Lecture**

"Visuo-Haptic Interface for Hair"

Nadia Magnenat-Thalmann

9:30 Coffee Break

9:50 **Session 1: Cyber Engineering**

"GASPAR : Aviation management on aircraft carrier using virtual reality"
Nicolas Marion, Cyril Septseault, Alexandre Boudinot and Ronan Querrec

"Simulated Reality in Automotive Design"

Andre Stork, Clemens-August Thole, **Stanislav Klimenko**, Igor Nikitin, Lialia Nikitina and Yuri Astakhov

"Generating Interactive 3-D Models for Discrete-Event Modeling Formalisms"

Matthias Becker

"3D Recovery with Simultaneous Accuracy Estimation and the Following Mesh Refinement"

Natalya V. Sveshnikova and Dmitry V. Yurin

"Applying Modern Soft- and Hardware Technologies for Computational Steering Approaches in Computational Fluid Dynamics"

Jan Linxweiler, Jonas Tölke and Manfred Krafczyk

12:00 Lunch

13:00 **Session 2a: Data Management and Artificial Intelligence**

"Visualization of Aligned Biological Networks: A Survey"

Steffen Brasch, Lars Linsen and Georg Fuellen

"Visual Clustering and Boundary Detection of Time-Dependent Datasets"

Olga Sourina, Dongquan Liu and Gleb V. Nosovskiy

"Applying Agent into Intelligent Web Application Testing"

Lei Xu and Baowen Xu

"Autonomous Robot Navigation in Cyber and Real Worlds"

Ray Jarvis, Nghia Ho, Julian Byrne Real

Session 2b: Cyber Ethics + Cyber Security

"Legal Aspects of Virtual Identity"

Jacob van Kokswijk

"Crime Lead Discovery on Gray Forum Communities: A Case Study on a 'Pirated-CD' Forum in Taiwan"

Jau-Hwang Wang, Hong-Ming Lin, Pin-Shan Lin and Wayne Chang

"User transparent 3D watermarking system based on security policy"

Yuseung Sohn, Gunnar Wallmann and Miguel Fernandes

14:50 Coffee Break

15:10 **Session 3: Cyber Information Systems**

"Towards 3D Internet: Why, What, and How?"

Tansu Alpcan, Christian Bauckhage and Evangelos Kotsovinos

"The Mathematical Structure of Cyberworlds"

Kenji Ohmori and Toshiyasu L. Kunii

"Development of Unit Calculation Algebra as an Application Function of the Cellular Data System"

Toshio Kodama, Toshiyasu L. Kunii and Yoichi Seki

"Towards the Reusable User Data in Adaptive Hypermedia Systems - The External Mapping of User Parameters between Systems"

Miroslav Bures and Ivan Jelinek

"Exploring State Diagram-based Web Browser Programming"

Yuka Obu, Mizuaki Yamamoto, Tatsuhiro Yonekura, Masaru Kamada and Shusuke Okamoto

17:30 End

18:30 **Cultural Event**

As a special event for the conference participants, we will visit the "New Town Hall" of Hannover (in fact it was build in 1913). One highlight of this tour will be the wonderful view from the roof, reached by Europe's only diagonal dome lift.

20:00 **Conference Dinner**

The Conference Dinner will take place in the "Restaurant am Leineschloss" and is not included in the conference fee. It can be booked at the reception for an additional EUR 35,- (drinks included).

Friday, October 26 - Main Conference Day 2

8:00 Reception

8:30 **Session 4: Virtual Humans**

"Production Friendly Character Skinning"

Johannes Saam, Jon Macey and Jian J Zhang

"Animating Groups of Socially Intelligent Agents"

Francisco Grimaldo, Miguel Lozano, Fernando Barber and Guillermo Viguera

"Real-Time Scalable Motion Planning for Crowds"

Fiorenzo Morini, **Barbara Yersin**, Jonathan Maïm and Daniel Thalmann

"Distributing Pedestrians in a virtual environment"

Murat Haciomeroglu, Robert Laycock and Andy Day

"Parameterized human body model for real-time applications"

Mustafa Kasap and Nadia Magnenat-Thalmann

11:00 Coffee Break

11:20 **Invited Lecture:**

Acquiring Photo-realistic Models with Reflectance Fields

Hendrik Lensch

12:05 Lunch

13:05 **Session 5a: Network + Distributed Virtual Environments**

"A Saturation Avoidance Technique for Peer-to-Peer Distributed Virtual Environments"

Silvia Rueda, Pedro Morillo and Juan M. Orduña

"ASSET: A Scalable Multicast Multi-Server Based Distributed Virtual Environments System"

Souad El Merhebi, Patrice Torguet, Jean-Pierre Jessel and Jean-Christophe Hoelt

"On an Analysis of Pass Play in a Virtual Ball Game"

Kazufumi Osato

"Adaptive 3D Content for Multi-Platform On-Line Games"

Francisco Morán Burgos, Marius Preda, Gauthier Lafruit, Paulo Villegas and Robert-Paul Berretty

"Minimization of Latency in Cheat-Proof Real-Time Gaming by Trusting Time-Stamp Servers"

Shunsuke Mogaki, Masaru Kamada and Tatsuhiko Yonekura

Session 5b: Virtual Reality + Human Interaction

"The Metaplastic Virtual Worlds"

Gianluca Mura

"A Generic Stochastic Method to Arrange Virtual Creatures in a 3D-Scenario"

Iván Piza, Félix Ramos and Fabiel Zúñiga

"Function-based haptic interaction in cyberworlds"

Lei Wei, **Alexei Sourin** and Olga Sourina

"Preliminary image registration for creation of virtual models of real objects"

Dmitriy B. Volegov and **Dmitry V. Yurin**

"A novel approach to express emotions through a flock of virtual beings"

Jesús Ibáñez, Carlos Delgado and Felipe Gómez

15:25 Coffee Break

15:50 **Session 6: Visualization**

"Collaborative Visualization of Tang Chang'an over the Internet"

Shuhong Xu, Yu Zhang and Chye Kiang Heng

"A Study on the Efficiency on Line Renderings of 3D Shapes"

Alexis Andre, Suguru Saito and Masayuki Nakajima

"Loading and rendering optimization for networked virtual worlds"

Ugo Barchetti, Alberto Bucciero, Luca Mainetti and Stefano Santo Sabato

16:50 Closing

17:00 End

Saturday, October 27 - NASAGEM'07 Workshop

- 8:00 Reception
- 8:30 Opening
- 8:40 **Session 1**
 Invited Lecture: "An Introduction to Persistent Homology"
Herbert Edelsbrunner
 "On Computing Handle and Tunnel Loops"
 Tamal K. Dey, **Kuiyu Li** and Jian Sun
- 10:00 Coffee Break
- 10:30 **Session 2**
 "Combinatorial 3-manifolds from sets of tetrahedra"
Marco Attene, Massimo Ferri and Daniela Giorgi
 "Computation of Geodesic Voronoi Diagrams in Riemannian 3-Space
 using Medial Equations"
 Henning Naß, Franz-Erich Wolter, **Hannes Thielhelm** and Cem Dogan
 "Medial Axis (Inverse) Transform in Complete 3-Dimensional
 Riemannian Manifolds"
Henning Naß, Franz-Erich Wolter, Cem Dogan, Hannes Thielhelm
 "Fast Inverse Forging Simulation via Medial Axis Transform"
Philipp Blanke and Franz-Erich Wolter
- 12:20 Lunch
- 13:20 **Session 3**
 "Conditional Random Field for 3D point clouds with Adaptive Data
 Reduction"
Ee Hui Lim and David Suter
 "Mass Density Laplace-Spectra for Image Recognition"
Niklas Peinecke and Franz-Erich Wolter
 "Global Medical Shape Analysis Using the Volumetric Laplace Spectrum"
Martin Reuter, Marc Niethammer, Franz-Erich Wolter, Sylvain Bouix and Martha Shenton
 "Part-based Annotation of Virtual 3D Shapes"
Marco Attene, Francesco Robbiano, Michela Spagnuolo and Bianca Falcidieno
- 15:10 Coffee Break
- 15:30 **Session 4**
 "Encoding Animated Meshes in Local Coordinates"
Rachida Amjoun and Wolfgang Straßer
 "A General Sixth Order Geometric Flow and Its Applications in Surface
 Processing"
Qin Zhang, Guoliang Xu and Jie Sun
 "Effective representation of 2D and 3D data using fractal interpolation"
Polychronis Manousopoulos, Vassileios Drakopoulos, Theoharis Theoharis and Pavlos
 Stavrou
 "Parametric Reconstruction of Bent Tube Surfaces"
Ulrich Bauer and Konrad Polthier
- 17:30 Closing
- 17:40 End