

IADIS International Computer Graphics and Visualization 2007

PRELIMINARY CONFERENCE PROGRAM

Thursday 5th, July 2007

08:30-19:00 Welcome Desk

15:00-15:30 Session O – Opening Session
(Room: Castelo V)

OPENING SESSION

Prof. Yingcai Xiao and Prof. Pedro Isaías

15:30-16:30 Session KL1 – Keynote Presentation
(Room: Castelo V)

REPRESENTING AND VISUALIZING UNCERTAINTY

Professor Alex Pang, University of California, Santa Cruz, USA

16:30-17:00 Coffee Break

17:00-18:55 Session FSRP 5.1
Visualization Applications // Geometric Modeling // Computational Geometry
(Room:Castelo V)

VISUALIZATION OF COMPRESSED 2D-VECTOR IMAGES (S_049)

Raquel Viaña

CHUB: A CARTOGRAPHIC HUMAN BODY MODEL (F_032)

Elizabeth Carvalho, Maribel Yasmina Santos and Adérito Marcos

CONVOLUTION AND VARIATIONAL IMPLICIT SURFACES IN SKETCH-BASED MODELING (F_015)

Zuzana Kukelová and Roman Durikovic

GENERATING SMOOTH POLYLINES ON TRIANGLE MESHES (S_025)

Georgios Stylianou

EXAMPLE BASED 3D FACE RECONSTRUCTION (R_018)

Georgios Stylianou and Andreas Lanitis

Friday 6th, July 2007

08:30-14:00 Welcome Desk

09:15-11:00 Session FRP 6.1

Animation // Other

(Room: Castelo V)

INTERACTIVE GPU-BASED COLLISION DETECTION (F_022)

Joachim Georgii, Jens Krüger and Rüdiger Westermann

DENSITY DISTRIBUTION AND LOCAL BEHAVIOUR FOR REALISTIC CROWD SIMULATION (F_027)

Kai Yip Wong, Mary-Ann Thyvetil, Andriana Machaira and Celine Loscos

EFFICIENT STIPPLE RENDERING (F_046)

Jens Krüger and Rüdiger Westermann

TOWARDS EFFICIENT REMOTE BROWSING SYSTEMS (R_051)

Juan Pablo García Ortiz

11:00-11:30 Coffee Break

11:30-12:45 Session SRP 6.2

Visual Data Analysis // Motion Detection and Tracking
(Room: Castelo V)

SHAPE SEGMENTATION FOR SHAPE DESCRIPTION (S_040)

Olga Symonova and Raffaele De Amicis

SEMI-AUTOMATIC INTERACTIVE VISUALIZATION OF QUANTUM DOT NANO-STRUCTURES (S_052)

Xinying Ye, Will Dudziak, Zhong-Hui Duan, Yingcai Xiao, Mingkun Sun, Ernian Pan and Peter W. Chung

A ROBUST METHOD FOR ESTIMATING PROJECTIVE TRANSFORMATIONS USING GENETIC ALGORITHMS (S_047)

Ran Song and John Szymanski

3D IMAGE SEGMENTATION BY CHAOTIC NEURAL NETWORKS: DYNAMIC REDUCTION ON OBJECT'S CONTOURS USING EXCITATORY-INHIBITORY PAIRS (R_029)

Abdelouahid Bouhouche, Abdenacer Nafir and Laidi Foughali

13:00-14:30 Lunch

15:00 Tour and Conference Dinner

We visit the city of Lisbon, driving along the Avenida da Liberdade, considered the most important avenue in the city, which lead us to the downtown. Passing the Rossio and the Commerce Square, along the river Tejo we reach the quarter of Belém, where we will see the most important monuments of the city. This was the place where Portuguese navigators started their voyages throughout the seas and discovered new routes and lands, which made the 15th and 16th centuries the “golden age” of Portuguese history. The Belém Tower was the fortress which defended the entrance of the harbour of Lisbon and, along with the Jeronimos Monastery, is World Heritage of UNESCO, masterpieces of the Portuguese manueline style.

We continue to the mouth of the river heading to the coastal glamorous places Estoril and Cascais, once residence of European nobles.

Along the coast of Guincho, we will reach Cabo da Roca, westernmost point of continental Europe, “where the land ends and the sea begins”.

Our next highlight will be the romantic town of Sintra, we drive along the mountain range, World Heritage of UNESCO, as “cultural landscape”, due to the lush vegetation and the magnificent monuments built along the centuries and the history of Portugal. Lord Byron named it “the glorious eden”.

After the visit of the town, once summer residence of Portuguese royalty, we proceed to a typical restaurant, where our dinner will take place.

Tickets for this can be bought at the welcome desk.

Saturday 7th, July 2007

08:30-16:00 Welcome Desk

09:10-11:00 Session FSP 7.1

Virtual Reality // Human-Computer Interaction

(Room: Castelo V)

**TRAVEL IN SMILE™: A STUDY OF TWO IMMERSIVE
MOTION CONTROL TECHNIQUES (F_039)**

Nicoletta Adamo-Villani and David Jones

SINGLE-PASS MULTI-VIEW VOLUME RENDERING

(F_023)

Thomas Hübner and Renato Pajarola

**VISUAL SIMULATION OF CONSTRUCTION ACTIVITIES
IN VIRTUAL ENVIRONMENTS (F_030)**

Alcnia Zita Sampaio and Pedro Gameiro Henriques

**A COMPUTER VISION-BASED METHOD FOR UTILIZING
THE HUMAN HAND IN AN AUGMENTED REALITY**

APPLICATION (S_026)

Rafael Radkowski and Helene Waßmann

11:00-11:30 Coffee Break

11:30-13:10 Session FSP 7.2

Scientific Visualization // Visualization Algorithms

(Room: Castelo V)

**Z-DIAMONDS: A FAST ISO-SURFACE EXTRACTION
ALGORITHM FOR DYNAMIC MESHES (F_044)**

Slavomr Petrk and Vclav Skala

IMAGE-SPACE SHEET-BUFFERED SPLATTING ON GPU

(F_037)

Sergi Grau and Dani Tost

**A NEW ALGORITHM FOR CONTENT-BASED 3D-IMAGE
RETRIEVAL (S_031)**

*Dumitru Dan Burdescu, Liana Stanescu, Razvan Tanasie and Anca
Ion*

**B-QUADTREE. A DATA STRUCTURE FOR URBAN
FLIGHTS AND WALKTHROUGHS (S_035)**

J.L. Pina, F.J. Sern and E. Cerezo

13:00-14:30 Lunch Break

14:30-15:20 Session FSP 7.3

Scientific Visualization

(Room: Castelo V)

**A VISUALIZATION ENVIRONMENT FOR NEMATIC
LIQUID CRYSTAL MATERIALS (F_048)**

Paul A. Farrell, Hong Ong, Arden Ruttan and Yang-Ming Zhu

**MULTI-DIMENSIONAL INTERPOLATION FUNCTION FOR
NON-UNIFORM DATA: MICROSPHERE PROJECTION**

(S_050)

William Dudziak

15:30 Best Paper Awards Ceremony and Closing Session

(Room: Castelo V)

Prof. Yingcai Xiao and Prof. Pedro Isaas