

Cyberworlds 2014

Schedule-At-A-Glance

| October 5th, Sunday (Day 0) | |
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| 17:30 – 18:30 | Guided Visit of the Royal Palace (Royal Palace of La Magdalena) |
| 18:30 – 20:00 | Welcome Reception & Cocktail (Royal Palace of La Magdalena) |

| October 6th, Monday (Day 1) | | |
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| 8:00 – 9:00 | Registration Starts (Conference Desk) | |
| 9:00 – 9:30 | Opening Ceremony (Riancho Room) | |
| 9:30 – 10:30 | Invited Talk 1 + Q&A <i>Professor Tomoyuki Nishita</i> (Riancho Room) | |
| 10:30 – 11:00 | Coffee Break (Salon de Baile) | |
| 11:00 – 12:35 | Parallel Session I | |
| | Session 1: Interaction (F4+S1) (Riancho Room) | Session 2: Arts I (F4+S1) (Bringas Room) |
| 12:35 – 13:00 | Poster Fast Forward & Announcements | |
| 13:00 – 14:20 | LUNCH | |
| 14:20 – 16:00 | Parallel Session II | |
| | Session 3: Multisensory (F5) (Riancho Room) | Session 4: BioSec I (F5) (Bringas Room) |
| 16:00 – 16:30 | Coffee Break (Salon de Baile) | |
| 16:30 – 17:40 | Parallel Session III | |
| | Session 5: Arts II (F2+S2) (Riancho Room) | Session 6a: BioSec II (F2) Session 6b: Cyberhumans I (F1) (Bringas Room) |
| 19:30 – 22:30 | Gala Dinner (Grand Casino of El Sardinero) | |

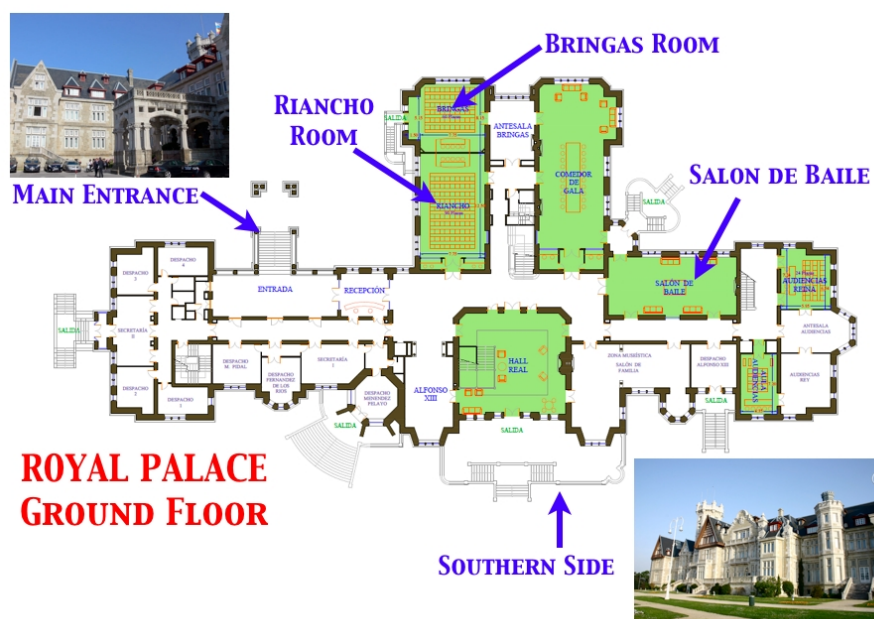
F: Full papers (20 mins.), S: Short Papers (15 mins.)

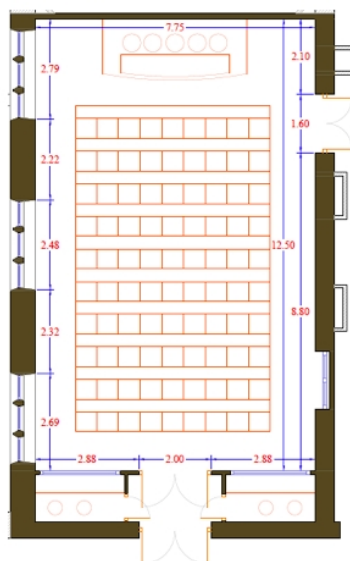
| October 7th, Tuesday (Day 2) | | |
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| | Parallel Session IV | |
| 9:00 – 10:40 | Session 7: Shapes & Curves (F5) (Riancho Room) | Session 8: Cyberhumans II (F5) (Bringas Room) |
| 10:40 – 11:10 | Coffee Break (Salon de Baile) | |
| 11:10 – 12:10 | Invited Talk 2 + Q&A <i>Professor Jian Jun Zhang</i> | |
| | Parallel Session V | |
| 12:10 – 13:30 | Session 9: Visualization (F4) (Riancho Room) | Session 10: Geometry & Maths (F4) (Bringas Room) |
| 13:30 – 14:45 | LUNCH | |
| 15:00 – 21:00 | Conference Tour | |

F: Full papers (20 mins.), S: Short Papers (15 mins.)

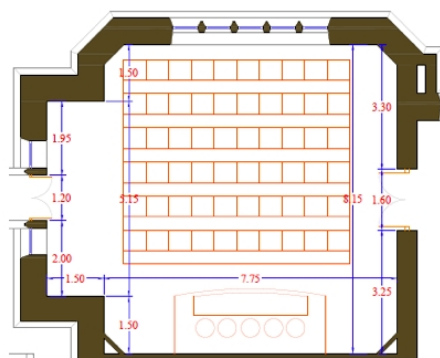
| October 8th, Wednesday (Day 3) | | |
|--------------------------------|---|--|
| | Parallel Session VI | |
| 9:00 – 10:40 | Session 11: Simulation & Space (F5) (Riancho Room) | Session 12: Cultural Heritage (F3) (Bringas Room) |
| 10:40 – 11:10 | Coffee Break (Salon de Baile) | |
| 11:10 – 12:10 | Invited Talk 3 + Q&A <i>Professor Bill Seaman</i> (Riancho Room) | |
| 12:10 – 14:15 | Poster Session & Art Show & Exhibition Cocktail Lunch | |
| 14:15 – 14:30 | Closing Ceremony (Riancho Room) | |

F: Full papers (20 mins.), S: Short Papers (15 mins.)

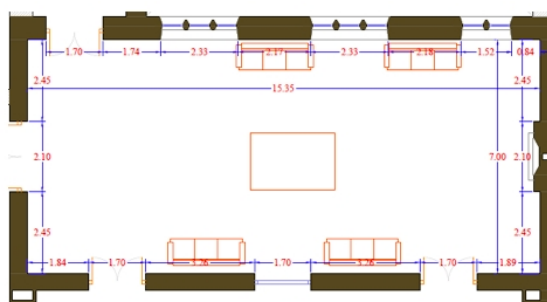




RIANCHO ROOM



BRINGAS ROOM



SALON DE BAILE

Detailed Conference Schedule

October 6, 2014 (Monday), 11:00-12:35

Parallel Session I

Session 1: Interaction (F4+S1) Riancho Room

[F] Feasibility Study for Contemporary Dance E-Learning: An Interactive Creation Support System Using 3D Motion Data
Bin Umino, Asako Soga, and Motoko Hirayama

[F] GPU-Based Realtime Hand Gesture Interaction and Rendering for Volume Datasets Using Leap Motion
Junchen Shen, Yanlin Luo, Xingce Wang, Zhongke Wu, and Mingquan Zhou

[F] Exploring Stereoscopic Multi-user Interaction with Individual Views
Vincent Kűszter, Guido Brunnett, and Daniel Pietschmann

[F] Sketch-Based Dance Choreography
Elahe R. Moghaddam, Javad Sadeghi, and Faramarz F. Samavati

[S] Feasibility Study on Free Hand Geometric Modelling Using Leap Motion in VRML/X3D
Jian Cui and Alexei Sourin

Session 2: Arts I (F4+S1) Bringas Room

[F] New Opportunities for Artistic Practice in Virtual Worlds
Denise Doyle

[F] Creative Approaches to Exploring the Interstice between the Virtual and the Real
Dew Harrison

[F] Liberated Formatization
Ulrich Gehmann, Marco Zampella, and Matthias Wűlfel

[F] How to Obtain Passwords of Online Scammers by Using Social Engineering Methods
Andreas Zingerle

[S] Wanderlost
Michael Johansson

October 6, 2014 (Monday), 14:20-16:00

Parallel Session II

Session 3: Multisensory (F5)

Riancho Room

[F] Haptic-Based Serious Games

Xiyuan Hou, Olga Sourina, Igor Kirillov, and Stanislav Klimenko

[F] Multisensory Experience with Images

Kan Chen, Xingzi Zhang, Shahzad Rasool, Henry Johan, and Alexei Sourin

[F] Stability of Features in Real-Time EEG-based Emotion Recognition Algorithm

Zirui Lan, Olga Sourina, Lipo Wang, and Yisi Liu

[F] Weight and Size Discrimination with Vibrotactile Feedback

Jonatan Martínez, Arturo S. García, Miguel Oliver, José P. Molina, and Pascual González

[S] Neurofeedback Games to Improve Cognitive Abilities

Yisi Liu, Olga Sourina, and Xiyuan Hou

Session 4: BioSec I (F5)

Bringas Room

[F] A Concept of Social Behavioral Biometrics: Motivation, Current Developments, and Future Trends

Madeena Sultana, Padma Polash Paul, and Marina Gavrilova

[F] Multimodal Biometrics Using Cancelable Feature Fusion

Padma Polash Paul and Marina Gavrilova

[F] Human Identification Using Sensors Data Based on 3D Gait Area

Sajid Ali, Zhongke Wu, Mingquan Zhou, Guoguang Du, Xulong Li, and Fan Pengcheng

[F] Mining Social Behavioral Biometrics in Twitter

Madeena Sultana, Padma Polash Paul, and Marina Gavrilova

[F] The Effects of Gameplay on Leadership Behaviors: An Empirical Study on Leadership Behaviors and Roles in Multiplayer Online Battle Arena Games

Tinnawat Nuangjumnong

October 6, 2014 (Monday), 16:30-17:40

Parallel Session III

Session 5: Arts II (F2+S2)

Riancho Room

[F] Exploring the Use of a 3D Virtual Environment in Chinese Cultural Transmission

Yungang Wei, Xiaoye Tan, Xiaoran Qin, Xiaohang Yu, Bo Sun, and Xiaoming Zhu

[F] The Meta Plastic Techne: A Cyber Metadiscipline between Science-Art-Design

Gianluca Mura

[S] Folding Pattern: A Study about Perception

Cristina Ghetti and Emanuelle Mazza

[S] (Re) Building Proun #5A in the Metaverse

Elif Ayiter

Session 6a: BioSec II (F2)

Bringas Room

[F] A Novel Pose Tolerant Face Recognition Approach

Refik Samet, Ghulam Sakhi Shokouh, and Jianjun Li

[F] Biometrics-Based Secret Key Agreement by Public Discussion with RFID System

Marcus V.C. Rodrigues, Felipe M. Masculo, Francisco M. de Assis, and Bruno B. Albert

Session 6b: CyberHumans I (F1)

Bringas Room

[F] Motivation System for Virtual Creatures: Actions Driven by Needs

Selene Zamarripa, Daniel Madrigal, and Felix Ramos

October 7, 2014 (Tuesday), 9:00-10:40

Parallel Session IV

Session 7: Shapes & Curves (F5)

Riancho Room

[F] Procedural Playable Cave Systems Based on Voronoi Diagram and Delaunay Triangulation
Aitor Santamaría-Ibirika, Xabier Cantero, Sergio Huerta, Igor Santos, and Pablo G. Bringas

[F] Scale-Invariant Heat Kernel Mapping
Kang Wang, Zhongke Wu, Pengfei Xu, Junli Zhao, Taorui Jia, Wuyang Shui, Sajid Ali, and Mingquan Zhou

[F] Isometric Shape Matching Based on the Geodesic Structure and Minimum Cost Flow
Taorui Jia, Kang Wang, Zhongke Wu, Junli Zhao, Pengfei Xu, Cuiting Liu, and Mingquan Zhou

[F] Simulated Annealing Algorithm for Bezier Curve Approximation
Carlos Loucera, Akemi Gálvez, and Andrés Iglesias

[F] Applying Clonal Selection Theory to Data Fitting with Rational Bézier Curves
Akemi Gálvez, Andrés Iglesias, and Andreina Avila

Session 8: Cyberhumans II (F5)

Bringas Room

[F] Safe Navigation of Pedestrians in Social Groups in a Virtual Urban Environment
Francisco Arturo Rojas, Hyun Seung Yang, and Fernando M. Tarnogol

[F] User Avatar Association in Virtual Worlds
Aslan Kanamgotov, Lyzgeo Koshy, Marc Conrad, and Simant Prakoonwit

[F] A Study on Perceived Similarity between Photograph and Shape Exaggerated Caricature
Jiayi Xu, Wei Yang, Xiaoyang Mao, Masahiro Toyoura, and Xiaogang Jin

[F] Automatic Generation of Skeleton Animation from 3D Human Mesh Model
Abdul Razzaq, Zhongke Wu, Mingquan Zhou, Sajid Ali, and Khalid Iqbal

[F] Example-Based Automatic Caricature Generation
Wei Yang, Kouki Tajima, Jiayi Xu, Masahiro Toyoura, and Xiaoyang Mao

October 7, 2014 (Tuesday), 12:10-13:30

Parallel Session V

Session 9: Visualization (F4)

Riancho Room

[F] Multilevel Focus+Context Visualization Using Balanced Multiresolution
Mahmudul Hasan, Faramarz F. Samavati, and Christian Jacob

[F] Optimizing and Visualizing Fire Dispatcher Activity
Sergey Mescherin, Igor Kirillov, and Stanislav Klimenko

[F] Real-Time Animated Visualization of Massive Air-Traffic Trajectories
Stefan Buschmann, Matthias Trapp, and Jürgen Döllner

[F] Interactive Visualization of Energy System
Haleh Alemasoom, Faramarz F. Samavati, John Brosz, and David Layzell

Session 10: Geometry & Maths (F4)

Bringas Room

[F] Constructive Roof Geometry
Johannes Edelsbrunner, Ulrich Krispel, Sven Havemann, Alexei Sourin, and Dieter W. Fellner

[F] Functorial Classification of Political Groups in the Meiji Restoration
Kenji Ohmori and Toshiyasu L. Kunii

[F] Clay Flower Creation Based on Homotopy Type Theory
Kenji Ohmori and Toshiyasu L. Kunii

[F] Molecular Geometry and BULL!
Youngsong Cho, Jae-Kwan Kim, Joonghyun Ryu, Mokwon Lee, Jehyun Cha, Chanyoung Song, and Deok-Soo Kim

October 8, 2014 (Wednesday), 9:00-10:40

Parallel Session VI

Session 11: Simulation & Space (F5)

Riancho Room

[F] Waterfall Simulation by Using a Particle and Grid-Based Hybrid Approach
Nobuhiko Mukai, Yasuomi Sakai, and Youngha Chang

[F] Image-Based Virtual Fitting System with Garment Image Reshaping
Hiroki Yamada, Masaki Hirose, Yoshihiro Kanamori, Jun Mitani, and Yukio Fukui

[F] Minimizing Collision among Social Groups in Wide-Open Spaces
Francisco Arturo Rojas and Hyun Seung Yang

[F] Interacting with Ads in Hybrid Urban Space
Matthias Wölfel

[F] Comparative Survey of Indoor Positioning Technologies, Techniques, and Algorithms
Mai A. Al-Ammar, Suheer Alhadhrami, Abdulmalik Al-Salman, Abdulrahman Alarifi, Hend S. Al-Khalifa, Ahmad Alnafessah, and Mansour Alsaleh

Session 12: Cultural Heritage (F3)

Bringas Room

[F] Crowd-Sourced Digitisation of Cultural Heritage Assets
Helen C. Miles, Andrew T. Wilson, Frederic Labrosse, Bernard Tiddeman, Seren Griffiths, Ben Edwards, Katharina Moller, Raimund Karl, and Jonathan C. Roberts

[F] Hybridization of Convergent Photogrammetry, Computer Vision, and Artificial Intelligence for Digital Documentation of Cultural Heritage - A Case Study: The Magdalena Palace
Oscar Cosido, Andrés Iglesias, Akemi Gálvez, Raffaele Catuogno, Massimiliano Campi, Leticia Terán, and Esteban Sainz

[F] A New Virtual Museum Equipped with Automatic Video Content Generator
Masaki Hayashi, Steven Bachelder, Masayuki Nakajima, and Akihiko Iguchi

October 8, 2014 (Wednesday), 12:10-14:15

Poster Session

Poster Session

(Salón de Baile)

Virtual Human Behavioural Profile Extraction Using Kinect Based Motion Tracking
Dimitar Stanev and Konstantinos Moustakas

Examples of Topological Modeling of Matrix-Structured Data and Use of the Applied Attachment
Function of the Cellular Data System
Toshio Kodama, Toshiyasu L. Kunii, and Yoichi Seki

ARecycle NOID ARt Game: The Augmented Reality Game in Public Space
Alena Mesarosova and Manuel Ferrer Hernandez