QoMEX 2016

8th International Conference on Quality of Multimedia Experience

Full Program

6-8 June 2016
Lisbon, Portugal

Full QoMEX 2016 Program at Glance

Lisbon Oceanarium, Parque das Nações

	Monday, June 6	**Tuesday, June 7**	**Wednesday, June 8**
8:00	Reception open	-	-
8:30		Reception open	Reception open
8:45-9:00	**Opening,** Fernando Pereira		
9:00-10:00	**Keynote 1: Perceptual Coding: Hype or Hope?** by C.-C. Jay Kuo, University of Southern California	**Keynote 2: Thinking Big: The 5 Senses** by Marianna Obrist, University of Sussex	**Keynote 3: Quality of Experience in Haptic Communication** by Eckehard Steinbach, Technical University of Munich
10:00-11:00	Oral Session 1: QoE for New Imaging Systems (3 papers)	Oral Session 3: Objective Quality Assessment (3 papers)	Oral Session 5: Audio and Speech Quality Assessment (3 papers)
11:00:11:30	Break	Break	Break
11:30-12:50	Oral Session 2: QoE for Multimedia Streaming (4 papers)	Oral Session 4: Cloud and Crowdsourcing: Emerging Challenges (4 papers)	Oral Session 6: Subjective Quality Assessment (4 papers)
12:50-14:00	Lunch	Lunch	Lunch
14:00-15:40	Special Session: Sound Quality and Audio Quality of Experience (5 papers)	Special Session: User Factors in Multimedia Experiences (5 papers)	Special Session: Visual Perception Modeling for Image/Video Compression (5 papers)
15:40-16:00	Break	Break	Break
16:00-17:00	Poster Session 1	Poster Session 2	Poster Session 3
17:00-18:00	Personal Testimony 1: Amy Reibman, Purdue University	Panel (moderator + 4 panelists)	Personal Testimony: Touradj Ebrahimi, EPFL
18:00		QoMEX Steering Committee meeting	

Note: the tutorial on QoE and Standardization will be held on Sunday, June 5, 2pm, at IST.

Monday, June 6

8:45   **Opening**
Fernando Pereira, QoMEX 2016 General Chair

9:00   **Keynote Talk 1**
Chair: Klaus Diepold, TUM

Perceptual Coding: Hype or Hope? *by C.-C. Jay Kuo, University of Southern California, San Diego, CA, USA*

10:00   **Oral Session 1: QoE for New Imaging Systems**
Chair: Frederic Dufaux, ParisTech

1. Glenn Van Wallendael, Paulien Coppens, Tom Paridaens, Niels Van Kets, Wendy Van den Broeck and Peter Lambert. *Perceptual Quality of 4K-Resolution Video Content Compared to HD*
2. **Award candidate: Vedad Hulusic, Giuseppe Valenzise, Edoardo Provenzi, Kurt Debattista and Frederic Dufaux.** ***Perceived Dynamic Range of HDR Images***
3. Philippe Hanhart, Martin Rerabek and Touradj Ebrahimi. *Subjective and Objective Evaluation of HDR Video Coding Technologies*

11:00   **Coffee Break**

11:30   **Oral Session 2: QoE for Multimedia Streaming**
Chair: Tobias Hossfeld, University of Duisburg-Essen

1. Arslan Ahmad, Alessandro Floris and Luigi Atzori. *QoE-aware Service Delivery: A Joint-Venture Approach for Content and Network Providers*
2. **Award candidate: Maria Plakia, Michalis Katsarakis, Paulos Charonyktakis, Ioannis Markopoulos and Maria Papadopouli.** ***On User-Centric Analysis and Prediction of QoE for Video Streaming using Empirical Measurements***
3. Rafael Rodrigues, Peter Pocta, Hugh Melvin, Manuela Pereira and Antonio M. G. Pinheiro. *MPEG DASH - Some QoE-based Insights into the Tradeoff between Audio and Video for Live Music Concert Streaming under Congested Network Conditions*
4. **Award candidate: Thomas Zinner, Matthias Hirth, Valentin Fischer and Oliver Hohlfeld.** ***ERWIN - Enabling the Reproducible Investigation of Waiting Times for Arbitrary Workflows***

12:50   **Lunch**
Lisbon Oceanarium restaurant

14:00   **Special Session: Sound Quality and Audio Quality of Experience**
Chair: Bruno Fazenda, University of Salford

1. Jon Francombe, Tim Brookes, Russell Mason and James Woodcock. *Determining and Labeling the Preference Dimensions of Spatial Audio Replay*
2. **Award candidate: Nick Zacharov, Chris Pike, Frank Melchior and Thierry Worch.** *Next Generation Audio System Assessement using the Multiple Stimulus Ideal Profile Method*
3. Alex Wilson and Bruno Fazenda. *Relationship Between Hedonic Preference and Audio Quality in Tests of Music Production Quality*
4. Colm Sloan, Naomi Harte, Damien Kelly, Anil Kokaram and Andrew Hines. *Bitrate Classification of Twice-Encoded Audio using Objective Quality Features*
5. Johannes Nowak, Kai-Peter Jurgeit and Judith Liebetrau. *Assessment of Spherical Microphone Array Auralizations using Open-Profiling of Quality (OPQ)*

15:40   **Coffee Break**

16:00   **Poster Session**
Chair: Tomás Brandão, ISCTE-IT

Long Papers
1. Samuel Dodge and Lina Karam. *Understanding How Image Quality Affects Deep Neural Networks*
2. Alexander Stojanow and Judith Liebetrau. *A Review on Conventional Psychoacoustic Evaluation Tools, Methods and Algorithms*
3. Saboya Yang, Gene Cheung, Patrick Le Callet, Jiaying Liu and Zongming Guo. *Computational Modeling of Artistic Intention: Quantify Lighting Surprise for Painting Analysis*
4. Long Xu, Lin Ma, Zhuo Chen, Xianyou Zeng and Yihua Yan. *Perceptual Image Quality Enahncement for Solar Radio Image*
5. Ines Saidi, Lu Zhang, Vincent Barriac and Olivier Deforges. *Interactive vs. non-Interactive Subjective Evaluation of IP Network Impairments on Audiovisual Quality in Videoconferencing Context*
6. Benhur Ortiz Jaramillo, Asli Kumcu and Wilfried Philips. *Evaluating Color Difference Measures in Images*

Short Papers
1. Dennis Guse, Anna Wunderlich, Benjamin Weiss and Sebastian Möller. *Duration Neglect in Multi-episodic Perceived Quality*

2. Alexander Martin Dethof, Werner Robitza and Marie-Neige Garcia. *StreamSim: A Video Streaming Simulation Toolchain for Unreliable Transport Mechanism*

3. Dawid Juszka. *Towards Using Entertaining 3D Video Sequences in Entertainment-oriented Subjective Experiments*

4. Falk Schiffner and Sebastian Möller. *Diving Into Perceptual Space: Quality Relevant Dimensions for Video Telephony*

5. Dietmar Saupe, Franz Hahn, Vlad Hosu, Igor Zingman, Masud Rana and Shujun Li. *Crowd Workers Proven Useful: A Comparative Study of Subjective Video Quality Assessment*

6. Karel Vandenbroucke, Aron-Levi Herregodts, Dimitri Schuurman and Lieven De Marez. *To Involve or not to Involve? Investigating the Contribution of Innovative Users to Subjective Video QoE Ratings*

7. Doreid Ammar, Poul Heegaard, Min Xie, Katrien De Moor and Markus Fiedler. *Revealing the Dark Side of WebRTC Statistics Collected by Google Chrome*

17:00   **Personal Testimony 1**

Chair: Fernando Pereira, IST-IT

"Quality research": From academia to industry and back again, *Amy Reibman, Purdue University, West Lafayette, IN, USA*

18:00   **End of the First Day**

18:30   **Welcome Cocktail**

Restaurante Marina Lisboa, Parque das Nações

Tuesday, June 7

9:00   **Keynote Talk 2**
Chair: Ulrich Reiter, TH-KOELN

Thinking Big: The 5 Senses *by Marianna Obrist, University of Sussex, UK*

10:00   **Oral Session 3: Objective Quality Assessment**
Chair: Lina Karam, Arizona State University

1. Amnon Balanov, Arik Schwartz and Yair Moshe. *Reduced-Reference Image Quality Assessment Based on DCT Subband Similarity*
2. **Award candidate: Lukas Krasula, Karel Fliegel, Patrick Le Callet and Milos Klima.** *On the Accuracy of Objective Image and Video Quality Models: New Methodology for Performance Evaluation*
3. Ahmed Aldahdooh, Enrico Masala, Olivier Janssens, Glenn Van Wallendael and Marcus Barkowsky. *Comparing Simple Video Quality Measures for Loss-Impaired Video Sequences on a Large-Scale Database*

11:00   **Coffee Break**

11:30   **Oral Session 4: Cloud and Crowdsourcing: Emerging Challenges**
Chair: Peter Schelkens, ETRO-VUB

1. Aleksandar Karadimche and Danco Davcev. *Perception of Quality in Cloud Computing Based Services*
2. **Award candidate: Michael Seufert, Ondrej Zach, Tobias Hoßfeld, Martin Slanina and Phuoc Tran-Gia.** *Impact of Test Condition Selection in Adaptive Crowdsourcing Studies on Subjective Quality*
3. Mirko Sužnjević, Ivan Slivar and Lea Skorin-Kapov. *Analysis and QoE Evaluation of Cloud Gaming Service Adaptation Under Different Network Conditions: the Case of NVIDIA GeForce NOW*
4. Michele Saad, Patrick Mcknight, Jacob Quartuccio, David Nicholas, Ramesh Jaladi and Philip Corriveau. *Consumer-Photo Quality Assessment: Challenges and Pitfalls in Crowdsourcing*

12:50   **Lunch**
Lisbon Oceanarium restaurant

14:00   **Special Session: User Factors in Multimedia Experiences**
Chair: Judith Redi, TUDelft

1. Pierre Lebreton, Alexander Raake and Marcus Barkowsky. *Studying User Agreement on Aesthetic Appeal Ratings and its Relation with Technical Knowledge*
2. Sharath Chandra Guntuku, Sujoy Roy, Lin Weisi, Kelvin Ng, Ng Wee Keong and Vinit Jakhetiya. *Personalizing User Interfaces for Improving Quality of Experience in VoD Recommender Systems*
3. Chen Wang, Jacqueline Wong, Xintong Zhu, Thomas Röggla, Jack Jansen and Pablo Cesar. *Quantifying Audience Experience in the Wild: Heuristics for Developing and Deploying a Biosensor Infrastructure in Theaters*
4. Romain Cohendet, Matthieu Perreira Da Silva, Anne-Laure Gilet and Patrick Le Callet. *Using Individual Data to Characterize Emotional User Experience and its Memorability: Focus on Gender Factor*
5. Niall Murray, Yuansong Qiao, Gabriel Muntean and Brian Lee. *The The Influence of Human Factors on Olfaction based Mulsemedia Quality of Experience*

15:40   **Coffee Break**

16:00   **Poster Session**
Chair: António Pinheiro, UBI

Long Papers
1. Darragh Egan, John Barrett, Yuansong Qiao, Sean Brennan, Christian Timmerer and Niall Murray. *An evaluation of Heart Rate and Electrodermal Activity as an Objective QoE Evaluation method for Immersive Virtual Reality Environments*
2. Baris Konuk, Emin Zerman, Gokce Nur and Gozde Bozdagi Akar. *Video Content Analysis Method for Audiovisual Quality Assessment*
3. Nick Zacharov, Chris Pike and Torben Holm Pedersen. *A Common Lexicon for Spatial Sound Quality Assessment - Latest Developments*
4. Bruno Fazenda, Iain Jackson, Paul Kendrick, Trevor Cox and Francis Li. *Perception and Automated Assessment of Audio Quality in User Generated Content - An Improved Model*
5. Stephan Werner, Florian Klein, Thomas Mayenfels and Karlheinz Brandenburg. *A Summary on Acoustic Room Divergence and Its Effect on Externalization of Auditory Events*
6. Friedemann Köster, Dennis Guse, Christian Miethaner and Sebastian Möller. *Towards Training Naive Participants for a Perceptual Annotation Task Designed for Experts*
7. Dragana Sandic, Federica Battisti, Dragan Kukolj, Patrick Le Callet and Marco Carli. *Free Viewpoint Video Quality Assessment based on Morphological Multiscale Metrics*

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Short *Papers*

1. Martin Rerabek and Touradj Ebrahimi. *New Light Field Image Dataset*

2. Maximilian Krumpholz, Benjamin Rainer and Christian Timmerer. *Towards Automated Subjective Quality Assessments*

3. Ines Saidi, Vincent Barriac, Lu Zhang and Olivier Deforges. *Evaluation of the Performance of ITU-T G.1070 Model for Packet Loss and Desynchronization Impairments*

4. Martín Varela, Hyunwoo Nam, Henning Schulzrinne and Toni Mäki. *Generating Realistic YouTube-like Stall Patterns for HTTP Video Streaming Assessment*

5. Rufael Mekuria, Michael McGrath, Christos Tselios, Dirk Griffioen and George Tsolis. *KPI Mapping for Virtual Infrastructure Scaling for a Realistic Video Streaming Service Deployment*

6. Jesús Gutiérrez, César Díaz, Pablo Carballeira, Fernando Jaureguizar and Narciso García. *ViCoCoS-3D: Videoconferencing Common Scenes*

7. Florian Metzger, Albert Rafetseder, Christian Schwartz and Tobias Hoßfeld. *Games and Frames: A Strange Tale of QoE Studies*

8. Sebastian Bosse, Dominique Maniry, Klaus-Robert Müller, Thomas Wiegand and Wojciech Samek. *Full-Reference Image Quality Assessment Using Neural Networks*

17:00   **Panel: QoE: from Academia to Industry, where are we ?**

Moderator: Ian Burnett, UTS

Panelists: Sebastian Möller, TU Berlin; Anna Ukhanova, Google Switzerland; Christian Timmerer, Alpen-Adria-Universität, Klagenfurt, José Pascoal, NOS

18:00   **End of the Second Day**

19:30   **Dinner**

Restaurante Bufalo Grill, Parque das Nações

Wednesday, June 8

9:00   **Keynote Talk 3**
Chair: Maria Paula Queluz, IST-IT

Quality of Experience in Haptic Communication *by Eckehard Steinbach, Technical University of Munich, Germany*

10:00   **Oral Session 5: Audio and Speech Quality Assessment**
Chair: Alexander Raake, TU Ilmenau

1. Sebastian Möller and Jens Berger. *Towards a Universal Value Scale for Quantifying the Quality of Speech Communication Across Services*

2. Werner Robitza and Alexander Raake. *(Re-)Actions Speak Louder Than Words? A Novel Test Method for Tracking User Behavior in Web Video Services*

3. Nadja Schinkel-Bielefeld. *Training Listeners for Spatial Audio Quality Evaluation in MUSHRA with a Special Focus on Loop Setting*

11:00   **Coffee Break**

11:30   **Oral Session 6: Subjective Quality Assessment**
Chair: Mylene Farias, University of Brasilia

1. Toinon Vigier, Yoann Baveye, Josselin Rousseau and Patrick Le Callet. *Visual Attention as a Dimension of QoE: Subtitles in UHD Videos*

2. Aditee Shrotre and Lina Karam. *Visual Quality Assessment of Reconstructed Background Images*

3. Marwin Schmitt, Judith Redi, Pablo Cesar and Dick Bulterman. *1Mbit is enough: Video Quality and Individual Idiosyncrasies in Multiparty HD Video-Conferencing*

4. Philippe Hanhart, Lukáš Krasula, Patrick Le Callet and Touradj Ebrahimi. *How to Benchmark Objective Quality Metrics from Paired Comparison Data?*

12:50   **Lunch**
Lisbon Oceanarium restaurant

14:00	**Special Session: Visual Perception Modeling for Image/Video Compression**

Chair: Patrick Le Callet, Univ. Nantes

1. Bo Hu, Leida Li, Jiansheng Qian and Yuming Fang. *Perceptual Evaluation of Compressive Sensing Image Recovery*
2. Yucheng Zhu, Guangtao Zhai, Ke Gu and Zhaohui Che. *Closing The Gap: Visual Quality Assessment Considering Viewing Conditions*
3. Manri Cheon and Jong-Seok Lee. *Ambiguity-based Evaluation of Objective Quality Metrics for Image Compression*
4. Alexandre F. Silva, Mylene C. Q. Farias and Judith A. Redi. *Annoyance Models for Videos with Spatio-Temporal Artifacts*
5. Karam Naser, Vincent Ricordel and Patrick Le Callet. *Estimation of Perceptual Redundancies of HEVC Encoded Dynamic Textures*

15:40	**Coffee Break**

16:00	**Poster Session**

Chair: Paulo Correia, IST-IT

Long Papers
1. Diego González-Zúñiga, Alberto Acuña-Silvera, Enric Martí-Godia and Jordi Carrabina. *Exploring the Introduction of Stereoscopic Depth in Applications to Change Perceived Quality*
2. Ahmed Aldahdooh, Marcus Barkowsky and Patrick Le Callet. Spatio-temporal *Error Concealment Technique for High Order Multiple Description Coding Schemes Including Subjective Assessment*
3. He Liu and Amy R. Reibman. *Software to Stress Test Image Quality Estimators*
4. Wei Zhou, Ning Liao, Zhibo Chen and Weiping Li. *3D-HEVC Visual Quality Assessment: Database and Bitstream Model*
5. Miguel Fidalgo-Fernandes, Marco V. Bernardo and Antonio M.G. Pinheiro. *A Bag of Words Description Scheme Based on SSIM for Image Quality Assessment*
6. Pedro Garcia Freitas, Welington Akamine and Mylene C.Q. Farias. *No-Reference Image Quality Assessment Based on Statistics of Local Ternary Pattern*
7. Andrei Purica, Giuseppe Valenzise, Beatrice Pesquet-Popescu and Frederic Dufaux. *Using Region-of-Interest for Quality Evaluation of DIBR-based View Synthesis Methods*

Short *Papers*
1. Li Song, Yankai Liu, Xiaokang Yang, Rong Xie and Wenjun Zhang. *The SJTU HDR Video Sequence Dataset*

2. Pierre Lebreton, Marie-Neige Garcia and Alexander Raake. *AVRate: An Open Source Modular Audio/Visual Subjective Evaluation Test Interface*

3. Péter András Kara, Peter Tamas Kovacs, Maria G. Martini, Attila Barsi, Kristof Lackner and Tibor Balogh. *From a Different Point of View: How the Field of View of Light Field Displays affects the Willingness to Pay and to Use*

4. Marie-Neige Garcia, Peter List, Bernhard Feiten, Ulf Wüstenhagen and Alexander Raake. *Audio-Video Databases for H.264-bitstream-based Quality Assessment of IPTV Services*

5. Chenyan Zhang, Aud Sissel Hoel and Andrew Perkis. *Quality of Immersive Experience in Storytelling: A Framework*

6. Hyeongnam Jang and Jong-Seok Lee. *Analysis of Gaze Patterns during Aesthetic Photo Quality Assessment*

7. Albrecht Kurze and Maximilian Eibl. *On Test Principles for a QoE Evaluation Using Real Services*

8. Alcardo Alex Barakabitze, Lingfen Sun, Is-Haka Mkwawa and Emmanuel Ifeachor. *A Novel QoE-Aware SDN-enabled, NFV-based Management Architecture for Future Multimedia Applications on 5G Systems*

17:00 **Personal Testimony 2**

Chair: Fernando Pereira, IST-IT

Back to my future as a researcher !, *Touradj Ebrahimi, EPFL, Switzerland*

18:00 **End of the Third Day**

Locations