

Special Session: Towards the Quality of Experience assessment for Immersive Media

Organized by Dr. Pablo Carballeira, Dr. Jesús Gutiérrez and Prof. Lu Yu

Rationale

In recent years, there has been a promising increment on the research and development of 3D display technologies (super multiview, light field, integral imaging, holographic, HMD, ...), seeking to achieve high 3D Quality of Experience (QoE) for immersive and free-viewpoint visual applications.

The assessment of the QoE in these new display devices and applications is, however, still an open issue. Image quality, depth quality, visual comfort, immersiveness and other technical and perceptual factors are subject to the specific characteristics of novel applications and display technologies. Therefore, the research on QoE is a keystone for the development of new immersive technologies, like compression techniques and its standardization in bodies such as MPEG or JPEG.

This special session focuses on the emerging challenges related to the assessment of QoE on visual applications driven by the latest 3D visualization technologies.

Topics of interest

- Multimodal experiences
- Visual perception properties with new 3D and immersive displays
- Subjective methodologies for QoE evaluation of new 3D and immersive displays
- Objective metrics for 3D QoE assessment
- QoE assessment for free-viewpoint navigation applications

Biography of the special session organizers

Dr. Pablo Carballeira received the Ph.D. degree in Telecommunication Engineering from the Universidad Politécnica de Madrid (UPM) in 2014. He is a researcher at the Grupo de Tratamiento de Imágenes (UPM) since 2007 and his current research interests include image processing, coding and subjective quality evaluation for super multiview and free navigation video scenarios.

Dr. Jesús Gutiérrez received the Ph.D. degree in Telecommunication Engineering from the Universidad Politécnica de Madrid (UPM) in 2016. He is a researcher at the Grupo de Tratamiento de Imágenes (UPM) since 2010, and his current research interests are in the areas of image and 3D video processing and evaluation of multimedia quality of experience.

Prof. Lu Yu received her Ph.D. degree on Communication and Electronic Systems from Zhejiang University, China in 1996. She is currently professor in the Department of Information and Communication Engineering, Zhejiang University. Her research interests include video coding, multimedia communication, visual perceptual and visual experience, and visual quality

assessment. She published more than 100 papers and contributed with 400+ technical proposals to international and national standards.

Important dates

Final paper submission underlies the same procedure as regular papers. Special Session papers will be published together with regular papers in the 3DTV-CON 2016 proceedings (see full information at the website: <http://www.3dtv-con.org>).

- Special session paper submission: ~~March 25~~ **April 8**, 2016
- Notification of Acceptance: May 13, 2016
- Camera-ready papers due: June 10, 2016