

Track 3: Metaverse/AR/VR

Wednesday, June 19, Conference Room 104	
09:00-10:30	Session 1, Chair: Prof. Yongtian Wang
09:00-09:30	Prof. Hong Hua (University of Arizona, USA) (Keynote) Title: The quest for visual comfort in virtual and augmented reality displays
09:30-09:50	Prof. Jae-Hyeung Park (Seoul National University, South Korea) (Invited) Title: Recent progress on super-multi-view and holographic near eye displays
09:50-10:10	Prof. Dewen Cheng (Beijing Institute of Technology, China) (Invited) Title: Advances and applications of AR near-eye display technology
10:10-10:30	Dr. Quan Liu (Zhejiang Sunny Optics, China) (Invited) Title: Pupil swim simulation and inspection method for XR optical modules
10:30-10:50	<i>Coffee break</i>
10:50-12:20	Session 2, Chair: Prof. Hong Hua
10:50-11:20	Prof. Daping Chu (University of Cambridge, UK) (Keynote) Title: Immersive driving experience with AR head-up display (HUD)
11:20-11:40	Prof. Qiong-Hua Wang (Beihang University, China) (Invited) Title: Integral imaging light field 3D display with good performance
11:40-12:00	Prof. Xinzhu Sang (Beijing University of Posts and Telecommunications, China) (Invited) Title: High definition 3D light-field communication and display with large viewing angle
12:00-12:20	Prof. Rengmao Wu (Zhejiang University, China) (Invited) Title: Design and fabrication of freeform holographic optical elements
12:20-13:40	<i>Lunch</i>
13:40-15:30	Session 3, Chair: Prof. Dewen Cheng
13:40-14:10	Prof. Ting-Chung Poon (Virginia Polytechnic Institute and State University, USA) (Keynote) Title: Optical scanning approach to computer-generated holography
14:10-14:30	Prof. Takeo Miyake (Waseda University, Japan) (Invited) Title: Integrated biodevices for smart contact lenses
14:30-14:50	Prof. Cheng Zhang (Huazhong University of Science and Technology, China) (Invited) Title: Multi-channel and crosstalk-free holographic projection by a spin and angle co-multiplexed metahologram
14:50-15:10	Prof. Xinxing Xia (Shanghai University, China) (Invited) Title: Extending the eyebox of holographic near-eye displays with holographic optical elements
15:10-15:30	Prof. Chao Ping Chen (Shanghai Jiao Tong University, China) (Invited) Title: Metaverse hardware: from wearable to implantable
15:30-15:50	<i>Coffee break</i>
15:50-17:30	Session 4, Chair: Prof. Chao Ping Chen
15:50-16:10	Prof. Wen Qiao (Soochow University, China) (Invited) Title: Planar optics based augmented reality 3D display
16:10-16:30	Prof. Yuning Zhang (Southeast University, China) (Invited) Title: Research progresses and challenges for polarization volume gratings based waveguide display
16:30-16:50	Prof. Enguo Chen (Fuzhou University, China) (Invited) Title: Light collimation design for micro-LED near-eye displays
16:50-17:10	Dr. Mingli Ni (National Virtual Reality Innovation Center, China) (Invited) Title: Holographic polymer materials for near-to-eye AR display
17:10-17:30	Prof. Liangcai Cao (Tsinghua University, China) (Invited) Title: High-speed and high-quality computer-generated holography with deep learning assistance
17:30-20:00	<i>Buffet</i>