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Poster Presentation

## [3Dp1/3DSAp1]3D and Hyper-realistic Displays and Applications 1

Thu. Nov 28, 2019 10:40 AM - 1:10 PM Main Hall (1F)

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10:40 AM - 1:10 PM

### [3Dp1/3DSAp1-8]High-resolution Mesh-based Computer-generated Hologram Synthesis using Fast Fourier Transform with Graphics Processing Unit

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Keywords:Holography, AR/VR, Hyper Reality

To reduce the calculation time of synthesizing mesh-based computer-generated hologram (CGH), we define valid frequency domain in off-axis condition which makes different path of DC and three-dimensional (3D) object. Also, we propose a graphics processing unit (GPU) based fast Fourier transform (FFT) method for calculating angular spectrum of mesh-based CGH.