## Dagstuhl Seminar on Real VR

# July 1-3, 2019

#### **Instructions for Wednesday AM1:**

- Put your abstract in <u>Abstracts Folder</u> (one abstract from each participant, saying what you've learned/thought about--can be the same as in physical book, or different)
- Break-out sessions notes--make an "abstract" at the top, out of the notes
- Please upload your presentation slides (pdf) to the "presentations" folder
- Also--don't forget the Dagstuhl Survey <a href="https://portal.dagstuhl.de/survey">https://portal.dagstuhl.de/survey</a>
  - User Name: 19272 (for access from outside Dagstuhl)
  - Password: 1599 (for access from outside Dagstuhl)

#### **Monday**

09:00 Session 1AM1:

 Welcome, agenda, goals & Dagstuhl specifics (Marcus Magnor and Alexander Sorkine-Hornung)

Getting to know each other

10:30 Coffee

11:00 Session 1AM2:

Presentation from Alexander Sorkine-Hornung "Real VR @ OCULUS"

Breakout I: Chairs: Gordon Wetzstein & Christian Richardt (Capture,

Reconstruction and Representation)

Chair: Anjul Patney & Li-Yi Wei (Interaction, Experiences, Rendering

& Perception)

Chair: Darren Cosker (Virtual Humans)

12:15 Lunch

14:00 Session 1PM1: Plein Air I

15:30 Coffee

16:00 Session 1PM2:

- Presentations I → (Chair: Tobias Bertel)
  - o Brian Cabral: Full-360 Inside-out Volumetric Video Capture
  - Tobias Bertel: Casual Real VR
  - Christian Lipski: Introducing Apple's ARKit 3: Real-Time Computer Vision on Mobile Devices
  - Gordon Wetzstein: Computational Near-eye Displays & Digital Eyeglasses with Focus Cues
  - Hansung Kim: Spatial Audio Reproduction System for VR Using 360° Cameras
  - o Erroll Wood: Hand Tracking for HoloLens 2
- Report on Breakout I

18:00 Dinner

19:30 Cheese & wine

#### **Tuesday**

#### 09:00 Session 2AM1:

- Presentations II → (Chair: Moritz Kappel)
  - o James Tompkin: Multi-view Camera Editing: A Few Notes
  - o Qi Sun: Human Learning: Understanding and Computing the Eyes and Brain in VR
  - Li-Yi Wei: Using Natural Gestures to Drive Synthetic Graphics for Presentation
  - o Darren Cosker: Virtual Characters and Interaction in Immersive Worlds
  - o Peter Eisert: Hybrid Human Modeling
  - o Anjul Patney: Towards Deep Real-Time Rendering for Mixed Reality

10:30 Coffee

11:00 Session 2AM2: Breakout II

12:15 Lunch

14:00 Session 2PM1: Plein Air II

15:30 Coffee

16:00 Session 2PM2:

- Presentations III → (Chair: Susana Castillo)
  - Philippe Bekaert: AZilPix. Bridging the Gap between VR and TV
  - o Christian Richardt: Towards Immersive 360- degree VR Video with Motion Parallax
  - Christian Theobalt: Capturing the real world for interaction in VR
  - Feng Xu: 3D Dynamic Reconstruction for Human
  - Dieter Schmalstieg: Shading Atlas Streaming
  - o Johanna Pirker: HCI meets VR: Learning through VR
- Report on Breakout II

18:00 Dinner

19:30 Cheese & wine

## Wednesday

09:00 Session 2AM1:

Writing session: Abstract and report writing for Dagstuhl report series

10:30 Coffee

11:00 Session 2AM2:

- Presentations IV → (Chair: tba)
  - Atanas Gotchev: 3D Visual Scene Sensing, Light Field Processing and Immersive Visualization
  - Marco Volino: Light-field video for cinematic VR content production
  - Marcus Magnor: What is still Missing in VR?
- wrap-up session, lessons learned and future plans

12:15 Lunch

### Links

http://www.dagstuhl.de/19272

Upload your slides to the seminar materials website <a href="http://www.dagstuhl.de/Materials/19272">http://www.dagstuhl.de/Materials/19272</a>.

Lunch and dinner are served at 12:15pm and 6:00pm, respectively.