

3DTV-CON 2016

Conference Agenda

Date: Sunday, 03/Jul/2016

7:00pm **Welcome Reception**
- Location: [Room Bern](#)
9:00pm

Date: Monday, 04/Jul/2016

7:30am **Registration desk**
- Location: [Lobbybar](#)

6:00pm

8:55am **Opening**
- Location: [Palais Esplanande](#)

9:00am Chair: **Joern Ostermann**

9:00am **Session 1: Capture and depth estimation**

- Location: [Palais Esplanande](#)

11:00am Chair: **Atanas Gotchev**

ASSESSMENT OF MULTI-CAMERA CALIBRATION ALGORITHMS FOR TWO-DIMENSIONAL ARRAYS RELATIVE TO GROUND TRUTH POSITION AND DIRECTION
Elijs Dima, Mårten Sjöström, Roger Olsson

METHOD FOR DETECTING INTEREST POINTS IN IMAGES USING ANGULAR SIGNATURES
David Grogna, Mohamed Boutayamou, Jacques G. Verly

MULTI-VIEW WIDE BASELINE DEPTH ESTIMATION ROBUST TO SPARSE INPUT SAMPLING
Lode Jorissen, Patrik Goorts, Gauthier Lafruit, Philippe Bekaert

SELF-SIMILARITY MATCHING WITH PREDICTIVE LINEAR UPSAMPLING FOR DEPTH MAP
Norishige Fukushima, Kouta Takeuchi, Akira Kojima

11:00am **Coffee break**
- Location: [Palais Esplanande](#)

11:15am

11:15am **Tutorial 1: 360° viewable digital holographic display**

- Location: [Palais Esplanande](#)

1:15pm Chair: **Mårten Sjöström**
presented by Jinwoong Kim and Keehoon Hong, ETRI, Korea

1:15pm **Lunch**

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2:15pm

2:15pm **Session 2: Towards the Quality of Experience assessment for Immersive Media**

- Location: [Palais Esplanande](#)

4:45pm Chair: **Pablo Carballeira**

Chair: **Lu Yu**

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

UNIVERSAL BLIND IMAGE QUALITY ASSESSMENT FOR STEREOSCOPIC IMAGES

Sid Ahmed Fezza, Aladine Chetouan, Chaker Larabi

A NOVEL IMAGE QUALITY INDEX FOR STEREO IMAGE

Jian Ma, Ping An, Zhi Xiang You, Li Quan Shen

SUBJECTIVE ASSESSMENT METHODOLOGY FOR SUPER MULTI-VIEW CONTENT

Wenhao Hong, Lu Yu

STUDY ON USER EXPERIENCE OF PANORAMIC IMAGES ON DIFFERENT IMMERSIVE DEVICES

Shilin Wu, Ning Liao, Zhibo Chen

TOWARDS QOE ESTIMATION OF 3D CONTENTS THROUGH NON-INVASIVE METHODS

Mattia Bonomi, Miguel Barreda-Angeles, Federica Battisti, Giulia Boato, Patrick Le Callet, Marco Carli

4:45pm **Coffee break**

- Location: [Palais Esplanade](#)

5:00pm

5:00pm **[Session 3: Modeling, representation and processing](#)**

- Location: [Palais Esplanade](#)

7:00pm Chair: **Marcus Magnor**

ADAPTIVE COLORIZATION-BASED COMPRESSION FOR STEREOSCOPIC IMAGES

Samira Ouddane, Kamel Mohamed Faraoun, Sid Ahmed Fezza, Chaker Larabi

LIGHT FIELD DENOISING: EXPLOITING THE REDUNDANCY OF AN EPIPOLAR SEQUENCE REPRESENTATION

Alireza Sepas-Moghaddam, Paulo Lobato Correia, Fernando Pereira

IMPROVED 2D-TO-3D VIDEO CONVERSION BY FUSING OPTICAL FLOW ANALYSIS AND SCENE DEPTH LEARNING

José Luis Herrera Conejero, Carlos R. del Blanco Adán, Narciso García Santos

A GRAPHICS COMPOSITION ARCHITECTURE FOR MULTIMEDIA APPLICATIONS BASED ON LAYERED-DEPTH-IMAGE

Roberto Gerson de Albuquerque Azevedo, Lima Guilherme

7:00pm **Buffet**

- Location: [Hotel restaurant](#)

7:40pm

7:40pm **Reeperbahn tour**

- Location: [Reeperbahn](#)

10:00pm

[Date: Tuesday, 05/Jul/2016](#)

8:00am **Registration desk**

- Location: [Lobbybar](#)

5:00pm

- 9:00am **Keynote: Next-generation virtual and augmented reality exploration and standardization**
- Location: [Palais Esplanade](#)
- 10:00am Chair: **Joern Ostermann**
Presented by Gauthier Lafruit
- 10:00am **Coffee break**
- Location: [Palais Esplanade](#)
- 10:15am
- 10:15am **Session 4: Rendering and view synthesis**
- Location: [Palais Esplanade](#)
- 12:15pm Chair: **Marco Carli**
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- PERCEPTUAL ORIENTED DEPTH CUE ENHANCEMENT FOR STEREOSCOPIC VIEW SYNTHESIS
Yi-Chun Chen, Tian-Sheuan Chang
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- VIRTUAL VIEW SYNTHESIS USING RGB-D CAMERAS
Chun-Liang Chien, Tzu-Chin Lee, Hsueh-Ming Hang
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- VIRTUAL VIEW SYNTHESIS QUALITY REFINEMENT
Tzu-Chin Lee, Chun-Liang Chien, Hsueh-Ming Hang
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- GHOSTING AND POPPING DETECTION FOR IMAGE-BASED RENDERING
Stefan Guthe, Douglas Cunningham, Pascal Schardt, Michael Goesele
- 12:15pm **Lunch**
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- 1:15pm
- 1:15pm **Tutorial 2: Light field - models, processing and compression**
- Location: [Palais Esplanade](#)
- 3:15pm Presented by Robert Bregović, Atanas Gotchev, Roger Olsson and Mårten Sjöström
- 3:15pm **Coffee break**
- Location: [Palais Esplanade](#)
- 3:30pm
- 3:30pm **Session 5: Compression**
- Location: [Palais Esplanade](#)
- 5:30pm Chair: **Roger Olsson**

SPARSE MODELLING AND PREDICTIVE CODING OF SUBAPERTURE IMAGES FOR LOSSLESS PLENOPTIC IMAGE COMPRESSION
Petri Helin, Pekka Astola, Bhaskar Rao, Ioan Tabus

GPU-BASED LOSSLESS VOLUME DATA COMPRESSION
Stefan Guthe, Michael Goesele

ILLUMINATION CHANGE ROBUST, CODEC INDEPENDENT LOW BIT RATE CODING OF STEREO FROM SINGLEVIEW AERIAL VIDEO
Holger Meuel, Florian Kluger, Jörn Ostermann

DECODING COMPLEXITY REDUCTION IN PROJECTION-BASED LIGHT-FIELD 3D DISPLAYS USING SELF-CONTAINED HEVC TILES
Alireza Zare, Péter Tamás Kovács, Alireza Aminlou, Miska Hannuksela, Atanas Gotchev

Date: Wednesday, 06/Jul/2016

9:00am **Session 6: Visualization**
- Location: [Palais Esplanade](#)
11:00am Chair: **Robert Bregovic**

FUSION OF POSE AND HEAD TRACKING DATA FOR IMMERSIVE MIXED-REALITY APPLICATION DEVELOPMENT

Katarzyna Czesak, Raul Mohedano, Pablo Carballeira, Julian Cabrera, Narciso Garcia

OMNIDIRECTIONAL FREE VIEWPOINT VIDEO USING PANORAMIC LIGHT FIELDS

Steven Maesen, Patrik Goorts, Philippe Bekaert

MULTI-LAYER LIGHT FIELD DISPLAY CHARACTERISATION

Philip Anthony Surman, Shizheng Wang, Kien Seng Ong, Xiaowei Sun, Junsong Yuan, Yuanjin Zheng

ANALYSIS OF THE LONGITUDINAL COMPONENT OF THE ELECTRIC FIELD GENERATED BY FLAT AND PIXELATED LIQUID CRYSTAL DISPLAYS

Onur Kulce, Levent Onural

9:00am **Registration desk**
- Location: [Lobbybar](#)

2:00pm

11:15am **Workshop: Plenoptic capture and processing**

- Location: [Palais Esplanade](#)
1:45pm Chair: **Atanas Gotchev**

3D LIGHT FIELD CAMERAS IN INDUSTRY AND RESEARCH

Christian Perwaß

SYNCHRONIZED DATA CAPTURE AND CALIBRATION OF A LARGE-FIELD-OF-VIEW MOVING MULTI-CAMERA LIGHTFIELD RIG

Sandro Esquivel, Yuan Gao, Tim Michels, Luca Palmieri, Reinhard Koch

SENSITIVITY ANALYSIS OF TIME-OF-FLIGHT SENSOR FUSION

Mårten Sjöström, Sebastian Schwarz, Roger Olsson

A LINEAR POSITIONING SYSTEM FOR LIGHT FIELD CAPTURE

Suren Vagharshakyan, Ahmed Durmush, Olli Suominen, Robert Bregovic, Atanas Gotchev

MULTI-CAMERA PRODUCTION SYSTEMS FOR VISUAL EFFECTS IN POST-PRODUCTION

Frederik Zilly

1:45pm **Closing**
- Location: [Palais Esplanade](#)

1:50pm