



The SCTE™ – The Society for Broadband Professionals

has pleasure in announcing
the next in its series of
Lecture Meetings hosted by the SCTE Benelux Group

BENELUX LECTURE MEETING

LUNCH SPONSORED BY



“VIRTUAL REALITY – AND THE IMPACT ON INTERNET ACCESS”

on

Monday 17 September 2018

at

The International Broadcasting Convention
TOPAZ LOUNGE (please note the new location)
RAI Exhibition & Congress Centre
AMSTERDAM

Registration and lunch at 13.00 pm

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"VIRTUAL REALITY – AND THE IMPACT ON INTERNET ACCESS"

The SCTE™ will host its annual Benelux Lecture Meeting as part of the IBC2018 conference programme on Monday 17 September 2018 in the new location of the TOPAZ LOUNGE. Following a complimentary light lunch buffet for all the Benelux Lecture attendees at 1.00 pm, the lecture presentations will commence. At the conclusion of the afternoon session, there will be a drinks reception at 5.00 pm. You don't have to be an SCTE member to participate in this free "Value Added" session at IBC, simply register with the SCTE Benelux Secretary, Rien Baan – see details below. Presented papers will be available for members to download from the SCTE website after the event. Please join us!

PROGRAMME

Session Description: *Volumetric video is regarded worldwide as the next important development step in media production. The rapid development of VR and its applications will be highlighted as well as consequences for the transport of these IP data. A Keynote speaker from the Heinrich Hertz Institute will open this session with up-to-date information about VR developments, followed by various industry-related companies with presentations on the technical implications for different networks and equipment.*

13.00-14.00 Registration and light lunch buffet (courtesy of ARRIS) for attendees of the session

14.00-14.10 Welcome by the SCTE Benelux Chairman

14.10-14.15 Introduction by the Moderator – Mr Ed Achterberg

14.15-15.00 "Advances in volumetric video and interactive VR"

Dr Oliver Schreer, Head of Immersive Media & Communication Group, Vision & Imaging Technologies Department, Fraunhofer Heinrich Hertz Institute

Volumetric video is regarded worldwide as the next important development step in media production. Especially in the context of the extremely rapid development of the Virtual Reality (VR) and Augmented Reality (AR) markets, volumetric video is becoming a key technology. In this talk, an overview is given on state-of-the-art in Virtual Reality media production with a special focus on Volumetric Video. Fraunhofer HHI is a leading research institute that has developed a new capture and processing system for volumetric video, called 3D Human Body Reconstruction (3DHBR). In addition, recent advances in interactive VR will also be presented.

15.00-15.30 "Improving the economics of immersive technologies in a cloud-based, dockerised application lifecycle laboratory"

Mr Gabor Molnar, PhD, Evangelist, Video Technology & Science, Divitel BV

Virtual Reality (VR) and Augmented Reality (AR) enable improved digital user experience, but application developers are struggling with end-to-end service quality testing due to the continuous software changes in multi-vendor service delivery platforms and the wide range of relevant subjective and objective measures. This presentation will shed light on how recent advances in Artificial Intelligence, cloud-technology and dockerisation can be employed to implement Quality of Experience (QoE) testing of VR and AR applications. It will detail the research and development work that Divitel has done to accelerate and automate end-to-end ecosystem quality testing, benefiting VR and AR developers as well as those active in more traditional TV and video environments.

15.30-16.00 Break for Refreshments

16.00-16.30 "Live VR: From venue to viewer – streaming the best seat in the house needs bandwidth"

Mr Charles Cheevers, CTO CPE Solutions, ARRIS

Future broadcast applications could allow home viewers to watch 180-degree VR live streams from their favourite sporting event. Venues could profit from selling the best seat at any sporting event hundreds, thousands, or millions of times. Concerts, theatre, live news from the ground as it's happening and more are revenue-generating venues waiting to be delivered. What type of bandwidth and network would be needed to make this happen?

Today, live VR generates 6-10Mbps per view at 1080p levels and this will increase significantly with 4K level transmissions. Long-term requirements to support a million unique streams from the stadium demand new technologies and improvements in event IT infrastructure. The presenter will review today's networks and what's needed for tomorrow to make live VR – from venue to viewer – a reality.

16.30-17.00 "How does Virtual Reality impact service provider networks, and how does this change service assurance and plant maintenance?"

Mr David Hering, Senior Product Line Manager for HFC Assurance Solution, VIAVI Solutions

New applications have always pushed the service providers to provide faster and more robust services. Video on Demand pushed for the introduction of two-way services. VoIP required improvements in packet loss and latency. Streaming video pushed downstream bandwidth requirements higher, fuelling the race for Gigabit services to the home. Now, as Virtual Reality becomes mainstream with applications for both entertainment and business services, the next level of network quality is required. This presentation discusses some of the changes anticipated for network operators as Virtual Reality moves from a science experiment to mainstream use.

17.00-17.30 Closing remarks by the Moderator/SCTE Benelux Chairman followed by a drinks reception for attendees.

Booking Details: On this occasion, there will be no charge for SCTE Members and non-Members to attend. However, for catering and registration purposes, please confirm your attendance with the Benelux Secretary (details overleaf) giving the names of any additional people attending.