FTV Seminar
~A Viewing Revolution in the Making~

14:00-18:00, July 8, 2014
Main Hall B, Sapporo Convention Center
Sapporo, Japan

A seminar on FTV (Free-viewpoint Television) will be held during the 109th MPEG meeting (http://mpeg109-sapporo.jp/) in Sapporo. The purpose of this seminar is to introduce MPEG's activity on FTV and to align our future standardization of FTV technologies with users and industry needs.

MPEG's current FTV standardization targets three very specific application scenarios:

- *Super Multiview Displays* where hundreds of very densely rendered views provide horizontal motion parallax for realistic 3D visualization, extracted from a dense or sparse set of input views/cameras in a circular or linear arrangement.
- *Integral Photography* where 3D video with both horizontal and vertical motion parallax are captured for realistic display.
- *Free Navigation* that allows the user to freely navigate or fly through the scene, not just along predefined pathways.

All of these new applications require advances beyond the capabilities of current technologies and standards. For instance, so far the 3D rendering capability supported by MPEG standards has been designed for linear camera arrangements and multiview systems with wide baselines and arbitrary camera arrangements have not been considered.

It is expected that future FTV systems will need a substantial increase in coding efficiency and rendering capability compared to currently available technology. Therefore the FTV initiative will consider various view topologies, including arc, 2D or even arbitrary camera arrangements, as well as novel means for acquiring 3D content that have recently emerged, e.g. plenoptic and light field cameras.

You are invited to join the FTV seminar to learn more about MPEG activities in this area and work with us to revolutionize the viewing experience. This seminar is open to the public.

Speakers:

- Masayuki Tanimoto (Nagoya Industrial Science Research Institute)
  "Targets of MPEG FTV"
- Marek Domanski (Poznan University of Technology)
  "Practicing free-viewpoint television: multi-view video capture and processing"

- Shoichiro Iwasawa (NICT)
  “REI: A large-screen automultiscopic projection display”
- Peter Kovacs (Holografika)
  “HoloVizio 3D light-field displays”
- Jun Arai (NHK)
  “Integral three-dimensional television”
- Jean-François Macq (Alcatel-Lucent Bell Labs Belgium)
  “Towards network-friendly video representations for free viewpoint navigation”
- Hiroshi Sankoh (KDDI)
  “Free-viewpoint Video Generation for Sports Scene”

Related Demo: FTV demo will be exhibited in Room 101 at 10:00-17:00, July 1 to 4.

Organizing Committee: Masayuki Tanimoto (Chair, NISRI), Takanori Senoh (NICT), Gauthier Lafruit (Universiteit Hasselt), Anthony Vetro (MERL), Karsten Mueller (HHI)

Participation: Free

Contact: sc29me@itscj.ipsj.or.jp

People who intend to participate the FTV seminar, please send an e-mail to the above address saying "I will participate the FTV seminar."