



Training programs of 3D Stereo MEDIA 2010
Liège, Belgium, 6-7 December 2010
(Version of 20 October 2010)

The organizers reserve the rights to make adjustments to the program.

DAY 1 – Monday, 6 December 2010

09:00 – 10:00 **Welcome and registration**
Coffee

10:00 - 10:10 **Introduction** (Jacques G. Verly and Peter Wilson)

10:10 - 10:20 **Objectives of training sessions** (John Watkinson)

10:20 - 11:25 **Introduction and history of stereoscopic production** (John Watkinson)

- 3D history.
- Overview of methods.
- Sexual dimorphism in photographic portraiture.
- Pre-existing ideas to explain size distortions in photography.
- First theory: Real objects occlude less background and appear slimmer in 3D.
- Stereoscopic and synoptic (2D) images.
- Size estimations of stereoscopic and synoptic (2D) objects.

11:25 – 11:35 **Coffee break**

11:35 - 13:00 **Introduction to human perception** (John Watkinson)

- The eye is not a camera.
- Visual memory.
- Visual sensation.
- Visual perception.
- The visual cortex.
- Depth cues for monocular vision and binocular vision.
- Retinal disparity.
- Parallax.
- Stereopsis (Accommodation and vergence).
- The importance of the subtended angle to the eye (Depth budget).
- Common artifacts of 3D capture (Crosstalk, gigantism, dwarfism, eyestrain, etc).

13:00 - 14:00 **Lunch break**

14:00 – 15:30 **Delivery and presentation systems** (Peter Wilson)

- Interlace V progressive.
- Segmented frame (Psf).
- The 1080 family.
- Synchronization signals.

- Genlock.
- Dual Link SMPTE 372.
- Stereo recorders.
- System diagrams.
- Methods of 3D projection.
- Glasses (Active and passive).
- Twin projectors versus single projector.
- Single projectors with polarizer accessories
 - Real D.
 - Masterimage 3D.
 - Active glasses.
- Spectral filters:
 - Dolby.
 - Panavision.
- Operational issues:
 - Power consumption.
 - Light output.
 - Silver screens / white screens.
 - Lenses.

15:30 – 16:00 **Coffee break**

16:00 – 17:15 **Practical capture** (Kommer Kleijn)

- Setups for stereoscopic capture.
- Close-coupled cameras.
- The use of semi-transparent silvered mirror.
- Coupled lens functions.
- Shooting parallel or converged (i.e. with toe-in).
- Digital geometry correction using stereoscopy processors.

17:15 **End of Day 1**

DAY 2 – Tuesday, 7 December 2010

08:00 – 08:45 **Welcome and registration**
Coffee

08:45 - 09:15 **Dimensionalization: 2D to 3D conversions** (Peter Wilson)

09:15 - 11:15 **The cinematographic aspects of stereoscopic techniques** (John Watkinson)

11:15 – 11:35 **Coffee break**

11:35 - 13:00 **Sound theory and its application to 3D stereoscopy** (John Watkinson)

- Psycho-acoustics.
- Image and sound contribution to perceptual understanding.
- Matching the acoustic and optical positions.
- Discrete channels V linear phase.
- Sound capture techniques.
- Sound production techniques.

13:00 - 14:00 **Lunch break**

14:00 – 16:00 **Computer graphics imaging (CGI) for 3D-movie making** (Guest speakers (TBD))

16:00 – 16:30 **Coffee break**

16:30 – 17:15 **Quantel and “fixing it in post”** (John Watkinson and Kommer Kleijn)

- Common problems and issues.
- Digital toe.
- What can be fixed and what needs a reshoot.
- Workstation-based vertical-disparity adjustment.
- Hardware and software solutions.
- Demonstration of the Quantel Pablo.
- Screening of posted and corrected work.
- Interactive wrap-up.

17:15 **End of Day 2**

Remarks

Please, note that this program is likely to be adjusted until the actual training sessions. Please, be sure to visit www.3dmedia2010.com/en/training regularly to get the most up-to-date version of the training programs.