

# MIAP Workshop

## Huygens Deconvolution Course 2017

Acquisition Strategies, Visualization and Analysis Tools



20<sup>th</sup> July – 21<sup>st</sup> July 2017

Center for Biological Systems Analysis (ZBSA)  
Freiburg University

**Organization** Microscopy and Image Analysis Platform (MIAP), Freiburg  
**Instructors** Daniel Sevilla Sánchez, MSc, Senior Developer/Project Leader at Scientific Volume Imaging (SVI), Netherlands

Day 1: July 20, 09:45 – 17:45	
09:45 – 10:00	<b>Welcome with Coffee and Tea</b>
10:00 – 10:45	<b>Introduction on Imaging:</b> General introduction to microscopic Image Formation and Image Restoration Deconvolution algorithms, Point spread function
10:45 – 11:30	<b>Acquisition Pitfalls!</b> How to deal with image distortions and acquisition pitfalls? Issues that will be addressed are for example noise, blurring, bleaching, spherical aberration, drift.
11:30 – 12:45	<b>All visualization options and tools in Huygens</b> • Slicer • Twin-slicer • Ortho-slicer • MIP • Volume renderer • Surface renderer* • Image-gallery • MovieMaker* • Cropper
12:45 – 13:15	<b>Practice with own or example data (concerning 4.)</b>
13:15 – 14:00	<b>LUNCH</b>
14:00 – 15:15	<b>Using the Huygens Remote Manager (Huygens Core)</b>
15:15 – 16:00	<b>Chromatic Aberration Corrector</b>
16:00 – 16:15	<b>Coffee and Tea</b>
16:15 – 16:45	<b>Object Stabilizer</b>
16:45 – 17:15	<b>Stitcher</b>
17:15 – 17:45	<b>Practice with own or example data (concerning 7.+ 8.)</b>

Day 2: July 21, 10:00 – 15:00	
10:00 – 10:45	<b>Analysis Options: Colocalization Analyzer</b>
10:45 – 11:30	<b>Practice with own or example data (concerning 2.)</b>
11:30 – 12:00	<b>Analysis Options: Object Analyzer</b>
12:00 – 12:30	<b>Practice with own or example data (concerning 3.)</b>
12:30 – 13:15	<b>LUNCH</b>
13:15 – 14:00	<b>Analysis Options: Object Tracker</b>
14:00 – 14:30	<b>Practice with own or example data (concerning 4.)</b>
14:30 – 15:00	<b>Coffee and Tea with Evaluation and end of the course</b>

Please bring own data with you to the course!

