## Advanced 3D Image Processing and Analysis with Amira Software



Understanding living cells and their processes requires analysis of data from various imaging systems and modalities that all use different file formats. Each experimental setup can represent a unique challenge to process the data. Multi-scale dynamic processes require tracking of various sized objects, from diffraction-limited particles to entire cells. Amira provides a comprehensive array of tools for the flexible and accurate analysis of volume data of cellular processes.

## October 15<sup>th</sup> – 16<sup>th</sup> 2019

Albert-Ludwigs University Freiburg Center for Biological Systems Analysis (ZBSA), Life Imaging Center (LIC) Habsburgerstr. 49, 79104 Freiburg im Breisgau

Organization:	Microscopy and Image Analysis Platform (MIAP), University of Freiburg
	Thermo Fisher Scientific
Teacher:	Jan Giesebrecht, Julien Roussel (Thermo Fisher Scientific)

Day 1: October 15 <sup>th</sup> , 9:00 – 16:30	
09:00 - 09:15	Welcome Workshop Day 1 & Workshop Introduction
09:15 - 10:15	Introduction to Amira Software
10:15 - 10:30	COFFEE BREAK
10:30 - 11:30	Amira Software Basics: GUI
11:30 - 12:30	Amira Software Basics: Visualization
12:30 - 13:30	LUNCH BREAK
13:30 - 14:30	Amira Software Basics: Image Processing
14:30 - 15:30	Amira Software Basics: Basic Segmentation
15:30 - 15:45	COFFEE BREAK
15:45 – 16:30	Open Q&A, Discussion, Closing Workshop Day 1

Day 2: October	16 <sup>th</sup> , 09:00 - 16:00
09:00 - 09:30	Welcome Workshop Day 2 & Summary Workshop Day 1
09:30 - 09:45	COFFEE BREAK
09:45 - 11:00	Amira Software Advanced: Alignment
11:00 - 12:30	Amira Software Advanced: SBF-EM
12:30 - 13:30	LUNCH BREAK
13:30 - 15:00	Amira Software Advanced: CLEM
15:00 - 15:15	COFFEE BREAK
15:15 - 16:00	Open Q&A, Discussion, Closing Workshop Day 2

You can bring your own research data examples for the hands-on sessions and Q&A parts. You can bring your own laptop including your own Amira Software installation to the practical parts. For more information, please contact MIAP: <u>https://miap.eu</u> <u>info@miap.eu</u>

