

1st MIAP BioImage Analysis Workshop

A basic Introduction for Life Scientists into ImageJ/Fiji and KNIME Image Processing



31st January – 2nd February 2017
Center for Biological Systems Analysis (ZBSA)
Freiburg University

Organization Microscopy and Image Analysis Platform (MIAP), Freiburg
Bioimaging Center (BIC), Konstanz

MIAP, the newly founded **M**icroscopy and **I**mage **A**nalysis **P**latform Freiburg will establish a highly competitive joint network for scientific infrastructure by providing access to high-end microscopy and image analysis resources.

Complex biological assays in combination with a wide variety of advanced microscopy and image analysis tools nowadays confront life scientists with selecting appropriate techniques for their application. As integrative platform MIAP will support life scientists to identify resources and to pipeline experiment workflows targeting the biological objective. Guidelines for user instruction, training, project planning and monitoring as well as regular series of seminars and workshops on different levels in microscopy, image analysis and related fields will be provided.

About the workshop: The 1st MIAP Bioimage Analysis Workshop intends to provide life scientists without advanced knowledge in image analysis an introduction into basic and state-of-the-art concepts of digital image processing using ImageJ/Fiji and the integrative software platform KNIME. The course will cover object segmentation, counting, feature extraction and colocalization. The aim is to provide the participants a portfolio of knowledge and solutions for basic bioimage analysis tasks.

- **ImageJ/Fiji** (<http://imagej.net> / <http://imagej.net/Development> / <https://fiji.sc>) represent the most widespread image analysis tools which are supported by a world-wide developer and user community. The open-source software is designed for scientific multi-dimensional images and is highly extensible, with thousands of plugins and scripts for performing a wide variety of tasks.
- **KNIME** (<http://www.knime.org>) represents a large integrative open-source data mining platform featuring a user friendly graphical interface which enables basic users to design workflows for data analysis in a highly efficient manner. The **KNIME Image Processing** extension **KNIP** (<http://tech.knime.org/community/image-processing>) provides integrations of ImageJ/ImageJ2 and others, thus comprising functionalities as offered by the integrated tools in addition to the functionality inherited from KNIME itself.

Registration <http://www.imaging.uni-freiburg.de>

The registration fee of 75€ covers finger food and refreshments (invoiced after the workshop)

Registration deadline: **January, 15th 2017**

