

Dr. Jan Brocher

Scientific Image Processing and Analysis

17–18 June 2013, 09.00–17.00 h

MMZ, Carl-Zeiss-Str. 3, SR 1100

A two-days course on processing of images according to scientific standards and methods on image analyses for scientific presentations, posters and publications.

- Basics in Microscopy and Imaging
- Digital Images, Bit-Depth and Color Spaces
- Correct Image Adjustments and Histogram Usage
- Image Segmentation - Extracting Data by Thresholds
- 3D, 4D, 5D Image Data Handling
- Image Annotation and Labeling
- Manual and Automatic Counting of Features
- Tracking Movements (optional)
- Quantitative Image Analysis - Length, Area, Volume, Surface, Intensity,...
- Batch Processing - Automation of Repetitive Tasks
- Effective Figure Preparation - DOs and DON'Ts

You will also learn about scientific ethics along with what kinds of image processing steps can lead to a potential accusation of scientific misconduct.

This course is particularly designed for doctoral candidates of the Natural Sciences (esp. Life Sciences):