

One-day "hands-on" workshop on Image processing using Image J (Fiji)

Objective:

At the end of this workshop, participants will acquire the knowledge on digital image analysis and will be able to perform image processing and analysis using the ImageJ software.

Tentative program:

9:00 - 12:00 - First session:

- **Introduction:**
 - Digital image concept (resolution, RGB - images, color, gray scale ...)
 - Image J software (Installation, Update, further modules)
- **Basic operations in imageJ**
 - How the GUI works
 - Image properties
 - Tools (Create selection, plot line, zoom, plot profile...)
 - Editing the image: setting threshold, brightness/contrast control, LUTs, transforming images...
- **Process images:**
 - Image calculator
 - Measurements (set measurements, Result table)
 - Particle analyser

12:00 - 13:00 – Lunch

13:00 - 15:30 - Second session:

- **ROI manager** (add, delete, clear, working with ROIs)
- **Stacks processing**
 - 3D reconstruction
 - time lapse images
 - Getting animated sequences for presentation
 - Working with Stacks
- **Plugins** - install plugin, run the plugin, Plugin/macro difference.

15:30 - 17:00 - Open discussion:

- Time for open discussion problems and on individual data with image processing.

Speaker/ Instructor:

- **Jérôme MUTTERER** (CNRS UPR 2357, Strasbourg)

Note:

- Each participant will have to bring their own laptop.
- Limited entry only.