**Workshop on BioImage Analysis**

**Icy for Beginners**

**Thursday 11th July 2019 / 13:30 – 17:30**

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**Aim**

The aim of this workshop is to introduce attendees to the free and open-source bioimage analysis platform Icy.

Students will be taught how to visualise and analyse their light microscopy images with Icy.

**Target Audience**

Researchers who want to extract meaningful data from their images.

**Learning Outcomes**

The course will give the attendees knowledge of bioimage analysis theory and practice.

It will develop their confidence in using bioimage analysis for their research.

**Content**

After a lecture on Introduction to bioimage analysis, demonstrations and practical exercises will explore the Icy interface to open, handle, visualise, annotate, process and analyse images.

We will see how to use Plugins for thresholding, spot detection, intensity measurement, spot and cell tracking. We will also see the interoperability with ImageJ macros.

**Prerequisites**

Some familiarity with image analysis or with ImageJ/FIJI will help, but is not necessary.

No scripting/programming experience necessary.

**Structure**

13:30 – 15.20: Introduction to bioimage analysis

 Icy website

Graphical User Interface, image loading, visualisation (2D/3D)

ImageJ interaction

Plugin installation

Image annotation, simple measurement

15:20 – 15:40: Tea/Coffee break

15:40 – 17:30: Basic analysis (intensity based)

Spot detection and tracking

Cell segmentation and tracking