



3rd October 2022: Lectures

- FBI and FRISBI: Two national infrastructures to serve electron microscopy (Claire Boulogne)
- Electron microscopy principles (Pierre-Damien Coureux, Ecole Polytechnique)
- Sample preparation TEM (Claire Boulogne, I2BC, Imagerie-Gif)
- Basics of SPA image analysis (Stéphane Bressanelli, I2BC, Structural Biology Department)
- Basics in Electron tomography (Emmanuelle Quemin, I2BC, Virology Department)

4th-5th and 6th -7th October 2022: Practical workshops

Attendees will be split into 2 groups and will attend the 2 practical workshops successively. Each practical course will last 2 days. The students will not have to move between locations on a single day to limit transport constraints

Workshop n°1: cryo-EM and single particle analysis (Ecole Polytechnique, Palaiseau)

Day 1: sample preparation for single particles (negative staining, plunge freezing, cryo-EM observation)

Day 2: image analysis and 3D reconstruction of single particles

Workshop n°2: Tomography on resin-embedded samples (I2BC, Gif-sur-Yvette)

Day 1: sample preparation of infected cells (fixation and resin embedding, ultramicrotomy)

Day 2: tomography (acquisition of tilted series, 3D reconstruction with imod, segmentation)

A social event will be organised in a restaurant the 5th or 6th October with all attendees and speakers.