

## TUESDAY, Dec 6, 2022

**Theoretical part**09:00-09:15 Introductory word and practical organization notes. *Ivan Novotny*09:15-09:45 Fluorescence microscopy and optical sectioning. *Ivan Novotný*09:45-10:15 Spinning disc microscopy. *Michaela Blazikova*

coffee break

10:30-11:00 Lightsheet. *Jiri Cerny*11:00-11:30 2-Photon microscopy. *Daniel Hadraba*

lunch

**Practical part:**12:30-20:00 (3 parallel groups, 3x 2.5h)2-Photon confocal microscope. *Daniel Hadraba*Confocal scanning & spinning disc. *Ivan Novotný | Jan Valecka*Lightsheet. *Jiri Cerny*

coffee break and sandwich dinner are included



## WEDNESDAY, Dec 7, 2022

**Theoretical part**09:00-09:30 Superresolution & live cell. *Ivan Novotný*09:30-10:00 Quantitative phase imaging. *Martin Čapek*

coffee break

5x scientific flash talks covering the field:

TBA

11:30-12:00 Photo-kinetics measurement in live cell. *Michaela Blazikova*

lunch

**Practical part:**13:00-19:00 (3 parallel groups, 3x 2h)Super-resolution room (STED, SIM) *Ivan Novotný*Photo-kinetics and FLIM applications. *Michaela Blazikova*Quantitative phase imaging - qPI + TIRF. *Martin Čapek + Jan Valecka*

coffee break is included

SOCIAL EVENT

## THURSDAY, Dec 8, 2022

**Theoretical part I**09:00-10:00 Image Deconvolution *Ivan Novotny*09:30-10:00 3D visualization *Jan Valecka*

10:00-11:35 Presentations of partners (6x 15 min talk + 1 short talk) + coffee

11:35-12:10 High resolution computational methods in LM. *Michaela Blazikova*

lunch

**Practical part:**13:00-17:30 (3 parallel groups, 3x 1.5h)NIKON spinning disk Crest Optics X-light V3 with DeepSIM. *NIKON application specialist*Leica STELLARIS 8 - LasX Lightening. *Ivan Novotný*Andor Dragonfly SRRF-tream2. *Michaela Blazikova*

coffee break is included

**Theoretical part II**

17:30-18:00 Discussion/Conclusions/Final evaluation + pizza

The course is organized by the **Institute of Molecular Genetics of the Czech Academy of Sciences** in the framework of the **Czech-BioImaging** research infrastructure supported by **Ministry of education youth and sports (LM2018129)**



We make it visible.

