



## Cellular microscopy and image analysis

### Theoretical-practical course

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IBPM laboratories - c/o BBCD Department, via degli Apuli site

#### Day 1 - 13/07/2022

**9:30-12:15 Theoretical session.** Principles of dynamic imaging, applications and analyses.  
Aula Tatò (Via dei Sardi 70, II floor)

9:30 Pietro Cirigliano, Nikon Europe BV

Tailoring microscopy options to biological investigations: live imaging applications  
*Questions and answers*

10:15 Mario Guarracino, CNR Istituto di calcolo e reti ad alte prestazioni (ICAR) and University of Cassino

Machine learning and AI-based analyses in bioimaging applications  
*Questions and answers*

11:00 Break

11:15 Giacomo Cozzi, Nikon Europe BV

NIS Elements: a multipurpose software platform  
*Questions and answers*

12:00 Giulia Guarguaglini, CNR Institute of Molecular Biology and Pathology

A short introduction to the practical demonstration

12:15 Break

#### **14:30-17:00 Practical session 1.** Imaging live cells on the microscope

For space and safety reasons hand-on participation will be limited to 5 students, Via degli Apuli 4, microscopy lab - II floor - Meet link for the others.

#### Day 2- 14/07/2022

**9:30-12:00 Practical session 2.** Automated analysis of the time-lapse experiment

Entire audience on Meet

Questions and conclusions

