

# What's new in 3D Fluorescence Microscopy

## Combine super-resolution and live cell imaging

26 Nov – 6 Dec 2024

Optical Imaging Competence Centre Erlangen (OICE)

### Experience the new possibilities in gentle super-resolution imaging

Imaging Workshop with ZEISS Lattice SIM 5

Lattice Structured Illumination Microscopy (Lattice SIM) is a powerful imaging technique that surpasses the diffraction limit of light, enabling high-resolution imaging of biological samples. Lattice SIM 3 utilizes a lattice patterned illumination to generate images with increased resolution down to 140 nm. Its versatility enables imaging of various biological samples, including live cells, tissues, and organisms.

The workshop introduces participants to the fundamentals of Lattice SIM, covering hardware and software requirements, sample preparation, image acquisition, and Artificial Intelligence (AI) based image analysis.

**Hands-on demonstrations** will facilitate practical understanding of system alignment, pattern generation, image reconstruction as well as general handling of the system.

**Test your own samples.** Individual imaging and analysis slots will be organized. For additional AI based image analysis tasks a separate image analysis workstation will be available. Participants are encouraged to consider how Lattice SIM can enhance their own projects and provide valuable insights.

**We are looking forward to welcoming you at the OICE.**

### More Information & Registration

#### Location

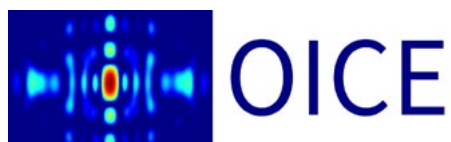


#### Optical Imaging Competence Centre Erlangen (OICE)

OICE room number: 01.115; 1st floor

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Seeing beyond