

Elective course: Imaging Techniques in Light Microscopy

Max-Rubner-Institute (MRI), Room 201 025

On Thursday 9:45 am - 11:15 (AK) am or 2:30 pm -4:00 pm (MB/mb)

1	Nov 14	Basic Wide Field Microscopy I (Bright field, Phase contrast, DIC)	MB
2	Nov 21	Basic Wide Field Microscopy II (Fluorescence Microscopy)	MB
3	Nov 28	Biological Sample Preparation	MB
4	Dec 05	Fluorescent Probes	AK
5	Dec 12	Optical Elements, Lasers and Light Sources, Light Detectors	AK
6	Dec 19	Basic Laser Scanning Microscopy (LSM)	MB
7	Jan 09	Advanced LSM	MB
8	Jan 16	Optical Sectioning Techniques	MB
9	Jan 23	Super Resolution Techniques (SIM, PALM, STED)	mb
10	Jan 30	Single Molecule Techniques (FCS, FRET, FLIM)	AK

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AK: Andrei Kobitzki (a.kob@kit.edu)

mb: Michael Bachmann (michael.bachmann@kit.edu)

Literature:

A.R. Hibbs (2004): Confocal Microscopy for Biologists, Springer

J.B. Pawley (2006): Handbook of Biological Confocal Microscopy, Plenum

R.D. Goldman & D.L. Spector (2005): Live Cell Imaging, CSH Press

S. Inoue & K. R. Spring (1997): Video Microscopy, Springer