



b UNIVERSITÄT BERN

MIC training: Super resolution microscopy

**Date:** March 1-2, 2021

**Time:** 9 am – 5 pm

**Location:** Online in Zoom, using this meeting <u>link</u>.

Trainers: Dr. Christine Strasser (Zeiss, Feldbach, CH), Dr. Marko Lampe (EMBL

Heidelberg, DE), Dr. Jana Doehner (University of Zurich, CH),

Dr. Yury Belyaev (University of Bern, CH)

**Organizer:** Dr. Y. Belyaev, University of Bern.

MIC of the University of Bern (www.mic.unibe.ch).

Supported by the PhD specialization Cutting Edge Microscopy.

Max number of participants: minimum 5, maximum 25

**Registration:** until February 25, 2021, please use this link.

**Target audience:** PhD students, postdocs, and everyone who needs super resolution

microscopy in their research. Participants of Cutting Edge Microscopy

specialization program are particularly invited.

**Credits:** Certificate of attendance.

On request, PhD students of the Cutting Edge Microscopy program can obtain 1.0 ECTS for this course with presenting the learning outcome in the context of his/her project at a separate meeting.

Background: STED from Leica and Airyscan from Zeiss allow for resolution

enhancement, both microscopy methods are available at MIC.

**Content:** Overview of super resolution microscopy methods, sample

preparation. Basics of STED and Airyscan techniques.

**Learning outcome:** Participants will learn how to prepare samples and perform STED and

Airyscan imaging.

**Schedule:** See next page.

## Super resolution microscopy

Time	Day 1 (01.03.2021)	Day 2 (02.03.2021)
9:00-12:00	Lectures, Zoom	Lectures, Zoom
	Nanoscopy	SR sample preparation
	M. Lampe, EMBL	J. Doehner, UZH
	STED	Hands-on, Zoom
	M. Lampe, EMBL	Deconvolution
		Y. Belyaev, MIC,
	Airyscan	M. Lampe, EMBL
	C. Strasser, Zeiss	
12:00-13:30	Lunch	Lunch
13:30-17:00	Hands-on, Zoom	Hands-on, Zoom
	Airyscan basics	Airyscan advanced
	C. Strasser, Zeiss	C. Strasser, Zeiss
	STED basics	STED advanced
	M. Lampe, EMBL	M. Lampe, EMBL