

PRE-CONFERENCE WORKSHOP

Superresolution Microscopy

From Principles to Practice

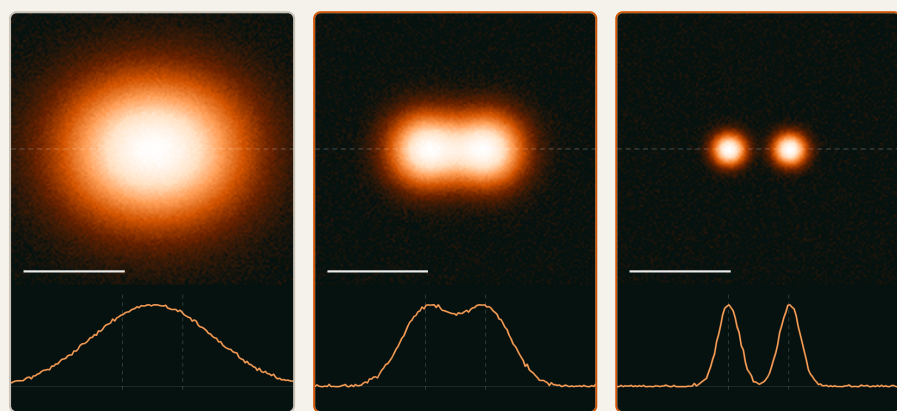
7–9 December 2026 • IISER Pune & BRIC-NCCS Pune

Hands-on with STED and Lattice SIM · Limited places, by application

Lattice SIM *vs* STED

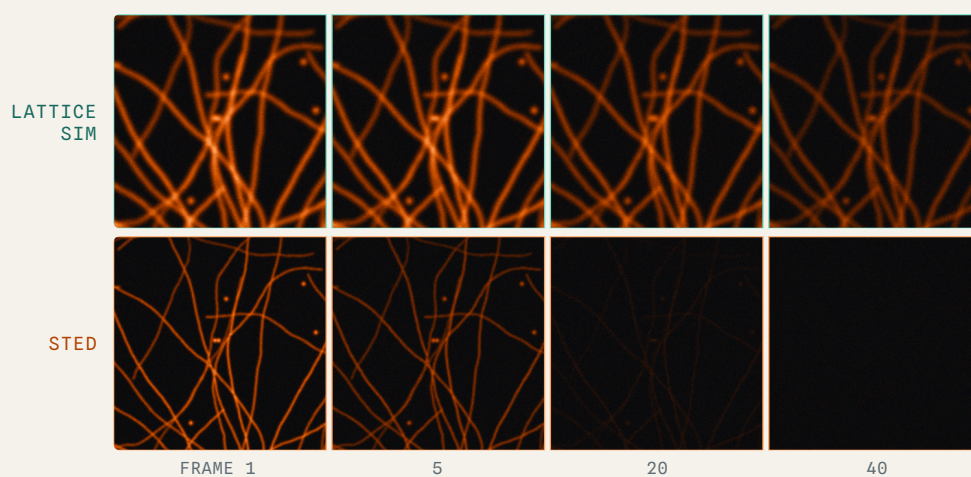
Two roads past the diffraction limit — and two different bills.

WHERE STED WINS — RESOLVING POWER



TWO POINT SOURCES 120 NM APART · PROFILE ALONG THE DASHED LINE · SCALE BAR 200 NM · SIMULATION

WHERE SIM WINS — PHOTON BUDGET



SAME STRUCTURE, SAME DISPLAY SCALING ON EVERY FRAME · DECAY CONSTANT ≈ 45 FRAMES FOR SIM, ≈ 7 FOR STED · SIMULATION

SIM buys a factor of two almost for free; STED buys four or five and pays in photons. A live, multicolour, whole-cell experiment usually wants SIM; a fixed sample with two structures 60 nm apart wants STED. Knowing which your question needs is half of what the workshop is for — so everyone works on both systems.

An intensive, advanced-level programme for **researchers, imaging scientists and facility professionals** who already work with microscopy — taking imaging past the confocal, from first principles to quantitative practice.

Extended hands-on time on **STED** at BRIC-NCCS and **Lattice SIM** at IISER Pune, in two batches of six that rotate between the systems. Participants may image their own prepared samples on the final afternoon.

THE THREE DAYS

MON 7 DEC Foundations — conventional fluorescence to superresolution; fundamentals of STED and of Lattice SIM; standardising each; image analysis. IISER PUNE

TUE 8 DEC Hands-on, in two batches — confocal to STED at BRIC-NCCS; point scanning to Lattice SIM at IISER Pune; batches exchange after lunch. BOTH CAMPUSES

WED 9 DEC Analysis & your own samples — SIM and STED data analysis; imaging of your own prepared samples by advance sign-up. IISER PUNE

DATES

7–9 Dec 2026

VENUES

IISER Pune
BRIC-NCCS Pune

PARTICIPANTS

12 two batches of six

APPLICATIONS CLOSE

31 Oct 2026*

FEE

₹5,000 students & post-docs

₹10,000 faculty & professionals

INCLUDED

All meals and two nights' shared accommodation

ELIGIBILITY — PLEASE READ BEFORE APPLYING

Prior hands-on experience in microscopy and image analysis is mandatory. Applicants from research laboratories and imaging core facilities where light microscopy is central are especially encouraged. Full-time participation throughout the three days is required.

APPLY HERE



aicbc2026.iiserpune.ac.in/#workshop



INSTRUMENT PARTNERS



aicbc2026.workshop@gmail.com

Organised under the 49th All India Cell Biology Conference

* provisional — confirm on the website before applying