SFBS 2026 - PROGRAM

Thematic School, October 14 - 16, 2026

Day 01 - Wednesday 14/10	Day 02 - Thursday 15/10	Day 03 - Friday 16/10
Introduction program of the 3 days, introduction of the participants and the trainers **Tutorial from widefield microscopy to super resolution** Interactive module to ensure that all participants have the correct basic knowledge of microscopy before moving on to SR. **Introduction to SR technique** Overview of the main families of SR microscopy, definitions, main performances, etc… **Introduction to STED Microscopy**	**Probes and and labeling strategies for SR** **Introduction to single-molecule localization microscopy (SMLM)** Presentation of SMLM basic principle, differents techniques and applications **Multiplexing and ultra-high resolution in SMLM** Exchange-PAINT, SUM-PAINT, RESI **SMLM in depth within complex tissues :** - AO-soSPIM - Light-Field Microscopy	**SMLM data analysis :** - SMLM: reconstruction principles and pitfalls - PSF retrieval approaches, Deep learning based localization - Clustering and colocalization **Structured Illumination Microscopy:** - Principles and implementation - Reconstruction algorithms **Expansion microscopy - *principles***
Lunch	Lunch	Lunch
Practical sessions (2 x 2h)	**Practical sessions (2 x 2h)**	**Practical sessions (2 x 2h)**
Coffee Break	Coffee Break	Coffee Break
STED Application seminar	**SIM Application seminar**	**SMLM Application seminar**

Practical sessions:

3 days, 2 demos per day = 6 demos in total to choose in the following proposal

Basics of SMLM :
2 color STORM 2D on cell culture (System: TBD - Trainer: M. Mondin)

Multiplexing in SMLM:
SUM-PAINT (System: Home-made - Trainer: E.M. Schentarra)

SMLM in Depth 1:
DNA-PAINT on organotypic slices (System: LLSM - Trainer: M. Ducros)

SMLM in Depth 2:
AO-DNA-PAINT (System: AO-SoSPIM microscope – *Trainer: Remi Galland & Laetitia Bettarel)*

STED 1:
STED microscopy 1 (System: LEICA system (BIC) – Trainer: *Christel Poujol*)

STED 2:
STED microscopy 2 (System: TBD - Trainer: TBD)

SIM 1 :
Hessian SIM on CSR system (System: CSRBiotech - Trainer: TBD)

SIM 2 :
Lattice SIM (System: Zeiss - Trainer: TBD)

Expansion microscopy :
Expansion microscopy (System: confocal – Trainer: Mónica Fernández Monreal)

SMLM visualization : Thomas Blanc

SIM reconstruction and analysis : Xiaoshuai Huang

SMLM analysis:

Clustering: Florian levet
Advanced reconstruction methods (PSF retrieval, DL Based localization) : Fan Xu

Scientific Congress October 19 - 21, 2026

	Day 1 - Monday 19/10	Day 2 - Tuesday 20/10	Day 3 - Wedensday 21/10
08:45	Inscriptions		
09:00		Speaker	Speaker
09:15			
09:30	Welcoming words	Speaker	Speaker
09:45	Speaker		
10:00		Short talk	Short talk
10:15	Short talk	Indus	Indus
10:30	Short talk	Coffee Break	Coffee Break
10:45	Coffee Break		
11:00		Speaker	Speaker
11:15	Speaker		
11:30		Speaker	Speaker
11:45	Speaker		
12:00		Speaker	Speaker
12:15	Indus		
12:30	Lunch	Lunch & Poster	Lunch
12:45			
13:00			
13:15			
13:30			
13:45			
14:00	Short talk		Short talk
14:15	Short talk		Short talk
14:30	Short talk	Short talk	Short talk
14:45	Short talk	Short talk	Short talk
15:00	Speaker	Speaker	Speaker
15:15			
15:30	Indus	Indus	Indus
15:45	Coffee Break	Coffe Break	
16:00			
16:15	Short talk	Short talk	
16:30	Short talk	Short talk	

16:45	Speaker	Speaker	
17:00			
17:15	Speaker	Speaker	
17:30			
17:45			
18:00	**Keynote Speaker** TBD	**Keynote Speaker** Bei Liu	
18:15			
18:30			
18:45			
19:00	Wine & Cheese	Gala dinner	