

DATES:		International School on Shaping light in space and time for biomedical imaging.					
14-20 May 2025	5 days						
28 slots							
	Day1 : Wednesday	Day2: Thursday	Day3: Friday	Day4: Saturday	Day5: Sunday	Day6: Monday	Day7: Tuesday
	14-05-25	15-05-25	16-05-25	17-05-25	18-05-25	19-05-25	20-05-25
	ARRIVAL DAY	Structured illumination, S1 - basics	Non-linear excitation microscopy, S2	Ophthalmology - polarization microscopy, S3	Imaging through scattering media, S4	Computational Imaging and Adaptive Optics, S5	DEPARTURE DAY
		principles	principles	principles	principles	principles	
9:00 - 10:00		Rainer Heinzman: principles of structured illumination	Raluca Niesner: three-photon microscopy, principles and experiments	Alberto Di Castro: Biomedical imaging of the eye, Eye Physiology, Eye modeling, Ocular Aberrations	ALBA PANIAGUA DIAZ: Wavefront control in scattering media	Hilton De Aguiar: Computational imaging in complex media	
10:00 - 11:00		Jacopo Bortolotti: Light transport in scattering media	Chiara Stringari: principles of non-linear label free functional imaging and non-linear coherent contrasts.	Alberto Di Castro: Biomedical imaging of the eye, Ocular aberrations and Adaptive Optics. Intro to OCT	Alexander Jesacher: Measuring and shaping wavefronts for improving optical microscopy	Pietro Ferraro, Computational imaging in DHM, tomographic reconstruction	
11:00-11:30		break	break	break	break	break	
11:30 - 12.30		Liangyi Chen: Quantitative and holistic superresolution live-cell imaging: from structured illumination microscopy to the sparse deconvolution algorithm	Hervé Rigneault: Principles of Coherent Raman microscopy	Andrea Curatolo, Optical Coherence Tomography: principles, clinical applications and research in ophthalmology	Alexander Jesacher: Application examples of using AO in deep tissue imaging	Paolo Pozzi: AO for microscopy	
12:30 - 15.00		Lunch break	Lunch break	Lunch break	Lunch break	Lunch break	
		Methods-Applications	Methods-Applications	Methods-Applications	Methods-Applications	Methods-Applications	
15:00 - 16:00		Liangyi Chen: Miniature microscopy for high spatiotemporal resolution imaging in freely-behaving mice: our ten years' journey	Raluca Niesner: 3PE: in vivo imaging in long bones and in secondary lymphoid organs	Adrian Podoleanu: The three main optical coherence tomography (OCT) methods and their applications	Rainer Heinzman: TBD	Hilton de Aguiar: Computational Raman microscopy	
16:00 - 17:00		Ilaria Testa: TBD	H. Rigneault: applications of Coherent Raman microscopy	Ana Batista: From Diagnosis to Treatment: leverage Nonlinear Microscopy Imaging in eye Biomedical Research.	ALBA PANIAGUA DIAZ: Light wavefront control in ophthalmology	Mario Marini: imaging through optical microstructured windows in vivo	
17:00 - 17:30		break	break	break	break	break	
17:30 - 18.30	Welcome session: TBD	Ilaria Testa: TBD	applications on non-linear label free imaging: second-harmonic Generation and third-harmonic Generation microscopy	Adrian Podoleanu: Unconventional OCT (Talbot bands, no Fourier Transform and time stretch)	Jacopo Bortolotti: Exploiting speckle correlations for non-invasive imaging through turbid media	Concluding remarks and final discussion	
18:30 - 20 .30	Evening break, get together in the cellar	Evening break, get together in the cellar	Evening break, get together in the cellar	Free evening with transport to the village	Evening break, get together in the cellar		
20.30-21.30		**Poster Presentation Session:** : An interactive session where authors present and discuss their research in front of a poster with participants at a school or workshop, providing a visual and oral overview of their work.	Luigi Bonacina: Nanotechnology and Nonlinear Optics Strategies for Enhanced Bioimaging		TBD		