FAIR CHARM WORKSHOP ON

NONLINEAR MICROSCOPY: INSTRUMENTS AND APPLICATIONS

Wednesday February 4th, 2026 - Section of Physics, University of Geneva

(Location→ https://www.unige.ch/sciences/physique/en/information)

Luigi Bonacina	09.00	09.05	Welcome & Intro to the Workshop
Ronan Cherau	09.05	09.30	Two-photon calcium imaging for studying cortical function in rodents.
Sara Gallini	09.30	09.55	Uncovering tumor suppression mechanisms through in vivo two-photon imaging
Dimokratis Karamanlis	09.55	10.20	LightSuite: a high-throughput pipeline for cellular-resolution analysis of large-scale 3D microscopy datasets
	10.20	10.45	Coffee Break
Quanyu Zhou	10.45	11.00	Needle beam two-photon microscopy for simultaneous multiplane neural and vascular imaging
Jin Tian	11.00	11.15	Coordinated two-photon fluorescence and optoacoustic microscopy of neural, vascular, and cellular dynamics in the mouse brain
Chiara Stringari	11.15	11.45	Polarization resolved label-free non-linear microscopy
Raluca Niesner	11.45	12.15	Optimizing three-photon microscopy and third harmonics generation for dynamic intravital deep marrow imaging of long bones
	12.15	13.30	Lunch Break
Lukas Kontenis	12.15	13.30 13.45	Lunch Break CRONUS 3P for Advanced Nonlinear Microscopy
Lukas Kontenis Alexandra Latshaw			
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Alexandra Latshaw	13.30 13.45	13.45 14.00	CRONUS 3P for Advanced Nonlinear Microscopy Geneva SWIM: Short Wave Infrared Microscope Thermal and Nonlinear Damage in Three-Photon Excitation
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Alexandra Latshaw Margaux Bouzin Lukas Krainer	13.30 13.45 14.00 14.15 1430	13.45 14.00 14.15 14.30 15.00	CRONUS 3P for Advanced Nonlinear Microscopy Geneva SWIM: Short Wave Infrared Microscope Thermal and Nonlinear Damage in Three-Photon Excitation Microscopy 3 Photon applications at Prospective Instruments Coffee Break
Alexandra Latshaw Margaux Bouzin Lukas Krainer Miltenyi Biotec	13.30 13.45 14.00 14.15 14.30	13.45 14.00 14.15 14.30 15.00	CRONUS 3P for Advanced Nonlinear Microscopy Geneva SWIM: Short Wave Infrared Microscope Thermal and Nonlinear Damage in Three-Photon Excitation Microscopy 3 Photon applications at Prospective Instruments Coffee Break TBD High resolution deep OCT imaging with femtosecond blue diode

Two-Photon

Three-Photon

Alt. Approach.