

Neurophotonics Summer School 2022

	Monday 13	Tuesday 14	Wednesday 15	Thursday 16	Friday 17
8:30	Arrival/briefing	Arrival/briefing	Arrival/briefing	Arrival/briefing	Arrival/briefing
9:00-10:30	Pina Colarusso Basics of optical microscopy (tbc)	Robert Campbell Genetically encoded fluorophores and reporters to illuminate neuronal activity	Mark Schnitzer Imaging large-scale neural coding and voltage dynamics in behaving animals	Kaspar Podgorski Computational microscopy, indicator engineering, and algorithms for image analysis (tbc)	Michelle Digman Lifetime imaging, FRET, TCSPC, phaser approaches
10:30-11:00	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break
11:00-12:30	Flavie Lavoie-Cardinal Principles of fluorescence and Superresolution approaches	Arjun Krishnaswamy Two-photon excitation of channelrhodopsins and circuit mapping	Estibaliz Gómez de Mariscal BioImage analysis: from visual to quantitative biology and the other way around	Paul De Koninck Tracking molecular events in neurons	Anna Devor Physiological underpinning of noninvasive imaging (tbc)
12:30-13:30	LUNCH	LUNCH	LUNCH	LUNCH	Plexon Lunch & Learn
13:30-14:30	Experiment preview	Experiment preview	Experiment preview	Experiment preview	Experiment preview
14:30-19:00	Hands-on Lab experiments and demos	Hands-on Lab experiments and demos	Hands-on Lab experiments and demos	Hands-on Lab experiments and demos	Hands-on Lab experiments and demos
19:00-20:00	Dinner	Dinner	Dinner	Dinner	Data analysis: Deep ImageJ
20:00-...	Introduction to digital imaging/Fiji	Poster session		Sports session - BBQ	19h: Les Salons d'Edgar (dinner + pool night)

	Saturday 18	Sunday 19	Monday 20	Tuesday 21	Wednesday 22
8:30	FREE TIME	Arrival/briefing	Arrival/briefing	Arrival/briefing	Arrival/briefing
9:00-10:30		Daniel Côté Multimodal cellular imaging <i>in vivo</i>	Ed Ruthazer Optical investigation of neuron glia interactions <i>in vivo</i>	Yves De Koninck Optogenetics: from basic principles to <i>in vivo</i> applications	Students presentations
10:30-11:00		Coffee break	Coffee break	Coffee break	Coffee break
11:00-12:30		Projects	Projects	Projects	Students presentations
12:30-13:30		LUNCH	LUNCH	LUNCH	LUNCH
13:30-19:00		Projects	Projects	Projects	Students presentations (until 15h30)
19:00-20:00		Dinner	Second group outing	Dinner	