

SNF Sinergia Summer School “Brain dynamics on the Connectome: how to combine M/EEG and diffusion MRI”

September 7-11, 2020	Day 1: September 7	Day 2: September 8	Day 3: September 9	Day 4: September 10	Day 5: September 11
	Introduction (Brain connectomics)	Diffusion + Structural Connectivity	EEG + Electrical Source Imaging (ESI)	Multimodal integration & Dynamic Functional Connectivity	Computational Modelling
8:00-8:30	Registration				
8:30 - 9:00	Introductory words by Patric Hagmann				
9:00 - 9:45	LECTURE 1.1 - Overview	LECTURE 2.1 - The Connectome	LECTURE 3.1 - EEG Neuroimaging: Advanced applications and challenges	LECTURE 4.1 - Static functional connectivity in EEG and fMRI	LECTURE 5.1 - Connectome-based graph signal processing in EEG
	Patric Hagmann and Serge Vulliemoz	Patric Hagmann	Christoph Michel and Serge Vulliemoz	Jonathan Wirsich	Katharina Glomb
9:45 - 10:00	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break
10:00 - 10:45	LECTURE 1.2 - Reproducible science	LECTURE 2.2 - Diffusion and Tractography	LECTURE 3.2 - EEG preprocessing	LECTURE 4.2 - Dynamic Functional Connectivity	LECTURE 5.2 - Computational modelling 1
	Sébastien Tourbier	Marco Pizzolato & J.P. Thiran	Pieter van Mierlo & Margherita Carboni	Gijs Plomp	Gustavo Deco
10:45 - 11:15	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
11:15 - 12:00	LECTURE 1.3 - Brain Parcellation	LECTURE 2.3 - Brain Networks Analysis	LECTURE 3.3 - From Sensor Space to Regions Of Interest	LECTURE 4.3 - Combining Structural and Functional Connectivity	LECTURE 5.3 - Computational modelling 2
	Yasser Alemán-Gomez & Katharina Glomb	Patric Hagmann & Katharina Glomb	Maria Rubega & Margherita Carboni	David Pascucci & Maria Rubega	Gustavo Deco
12:00 - 13:30	Lunch with blitz presentations of participants	Lunch brainstorm	Lunch brainstorm	Lunch brainstorm	Lunch brainstorm
	PROJECT TUTORIAL 1 - CMP	PROJECT TUTORIAL 2 - Diffusion	PROJECT TUTORIAL 3 - EEG	PROJECT TUTORIAL 4 - Combining structural and functional connectivity	PROJECT TUTORIAL 5 - Computational Modelling
13:30 - 17:00	Sébastien Tourbier	Sébastien Tourbier	Margherita Carboni	Jolan Heyse & Joan Rué Queralt	Elhum Shamshiri & Manel Vila-Vidal & Ane Lopez
	Make data BIDS-compliant and parcellate the brain	Get Structural Connectivity Matrices	Get time-series in brain regions	Get Dynamic Functional Connectivity constrained by structural information	Estimate parameters of a model of the brain based on EEG data.
(~14:45 - 15:00)	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
17:00 - 17:30	Brain Recovery and Refuel Time	Brain Recovery and Refuel Time	Brain Recovery and Refuel Time	Brain Recovery and Refuel Time	Brain Recovery and Refuel Time

17:30 - 20:00	Apero with blitz presentations of participants		LAUSANNE GUIDED TOUR & COMMON DINNER		Farewell Party
20:00 - 23:00					