



## BENESCO Lecture Series on sleep, epilepsy, consciousness and cognition

October 2020 - June 2021

Friday, 12:00 h – 13:00 h, Course Room Neurology, **Intensivbehandlungs-, Notfall- und Operationszentrum (INO), Floor B, Room 118**

**Description:** The BENESCO lecture series consists of a teaching classes on signal analysis by MATLAB and lectures covering sleep, epilepsy and consciousness research from bench to bedside. Expert speakers present state of the art research and newest findings in their field of expertise. Moreover, they provide you with one paper to read as an introduction to the topic that will be the basis for the multiple choice exam. During the teaching classes on *signal analysis by MATLAB* you will be introduced to current tools and methods used to acquire brain signals. Each lecturer will provide you with programming code and exercises that you solve individually.

**Credits:** 2 ECTS points. For credits you have to attend 70 % of the teaching classes and lectures and to pass a multiple choice exam by the end of the two semesters. Multiple choice questions are based on the literature provided for each lecture and teaching class and on the contents taught during lectures and classes.

**Registration:** by e-mail to [cornelia.klopfenstein@insel.ch](mailto:cornelia.klopfenstein@insel.ch), please indicate full name, PHD-program and supervisor

**Organizers:** Antoine Adamantidis, Maxime Baud, Claudio Bassetti, Simone Duss, Kaspar Schindler, Maya Ringli, Carolina Gutierrez, Roger Hunziker, Cornelia Klopfenstein

### PROGRAM fall term

Date	Type	Topic	Speakers
17.09.2020	<i>Sw webinar</i>	Berner Schlaf-Wach-Tage als Webinar	Sep. Programm
	<i>intro</i>	Welcome and organization	Dr. Maxime Baud
09.10.2020	11:45 <i>Lecture</i>	“Monitoring brain injury with microelectrode biosensors” Chair: Dr. Markus Schmidt	Dr. Stéphane Marinesco, Lyon Neuroscience Research Center (CRNL), University of Lyon
16.10.2020	<i>Lecture</i>	“Large-scale epileptic networks in focal epilepsies: development and mechanisms” Chair: Dr. Maxime Baud	Dr. Charles Quairiaux, Department of Basic Neurosciences, University of Geneva
23.10.2020	<i>Lecture</i>	«Astrocyte-synapse interaction: a tripartite view on cortical circuit development» Chair: Dr. Carolina Gutierrez	Paola Bezzi, DNF, Department of Fundamental Neurosciences, University of Lausanne
30.10.2020	<i>IRC Lectures</i>	“Decoding Sleep”	Dr. Carolina Gutierrez Herrera, Center for Experimental Neurology, Inselspital, Bern University Hospital

06.11.2020 13:30 – 14:30	<i>Grand-Round Auditorium Maurice E. Müller</i>	"Engram patterns: neural codes for memory and navigation" Chair: Prof. Dr. Christoph Nissen	Prof. Dr. Nikolai Axmacher, Institute of Cognitive Neuroscience, Department of Neuropsychology, Ruhr University Bochum IB 6/185
06.11.2020	14:30 – 15:15	Coffee break and meet the Professors	
06.11.2020 15:15 – 16:00	<i>Grand Round Auditorium Maurice E. Müller</i>	"The cognitive Neurology of "dementia" in the era of biomarkers: promises and clinical reality" Chair: Dr. Maxime Baud	Prof. Dr Jean-François Demonet, MD, PhD, Neurologist, Head of Service, Director Leenaards Memory Centre, Clinical Neuroscience Department, Lausanne University Hospital (CHUV)
20.11.2020	Lecture	title follows Chair: Prof. Dr. Antoine Adamantidis-	Dr. Nathalie Rochefort, Centre for Discover Brain Sciences, University of Edinburgh
27.11.2020	Lecture	"From sleep misperception to paradoxical insomnia" Chair: Dr. Markus Schmidt	Prof. Dr. Mauro Manconi, Sleep and Epilepsy Centre of the Neurocentre, hospital of Lugano
04.12.2020	Lecture	title follows Chair: Prof. Dr. Antoine Adamantidis	PD Dr. phil. nat. Sonja Kleinlogel, Institute of Physiology, University of Bern
11.12.2020	Lecture	"Recent insights into remote fear memory attenuation" Chair: Prof. Dr. Antoine Adamantidis	Johannes Gräff, Brain Mind Institute School of Life Sciences, Ecole Polytechnique Fédérale de Lausanne (EPFL)
18.12.2020	Lecture	"Dynamics of Epilepsy" Chair: Dr. Maxime Baud	Dr. Timothée Proix, Department of Neurosciences, University of Geneva

### PROGRAM spring term

05.02.2021	Lecture	"Deep dive into Motor circuitry" Chair: Maxime Baud	Dr. med. Gerd Tinkhauser, Department for Bio Medical Research (DBMR), University of Bern
12.02.2021	Lecture	"Neuronal ensembles seize together" Chair: Dr. Maxime Baud	Dr. Michael Wenzel, Clinic of Epileptology, Friedrich –Wilhelm-University of Bonn
19.02.2021	<i>Grand-Round</i>	Date reserved for event	
12.03.2021	Lecture	title follows Chair: Dr. Markus Schmidt	Paul-Antoine Libourel, Centre de Recherche en Neurosciences de Lyon, Equipe SLEEP, Centre Hospitalier Le Vinatier, Bron Cedex
19.03.2021	Lecture	"Sodium oxybate and sleep-wake regulation in healthy volunteers" Chair: Dr. Leila Tarokh	Prof. Hans-Peter Landolt, PhD, Human Sleep Psychopharmacology Laboratory, Institute of Pharmacology & Toxicology, University of Zürich

26.03.2021	<i>Class</i>	“An introduction to fundamentals of nonlinear signal analysis”	Prof. Dr. Ralph Gregor Andrzejak, Dept. of Information & Communication Technologies, University Pompeu Fabra, Barcelona
02.04.2021		Karfreitag / Good Friday	
23.04.2021	<i>Lecture</i>	“Multisensory bodily processing and Self-Consciousness” Chair: Dr. Maxime Baud	Dr. med. Lukas Heydrich, MD PhD, FMH Neurologie, Research Fellow, Universitätsklinik für Neurologie, Abteilung Psychosomatik, Core Lab, Inselspital Bern
14.05.2021		Auffahrt	
21.05.2021	<i>Grand-Round</i>	Date reserved for event	
28.05.2021		<a href="#">title follows</a> Chair: PD Dr. med. Anke Salmen	Prof. Dr. Edgar Meinl, Institute of Clinical Neuroimmunology, University Munich