

FOR 2705 Spring School on

Modeling and Analysis of Spiking Neural Networks

Feb 10 – Feb 21, 2020

Venue:

University of Cologne, Biocenter, Zùlpicherstr. 47B, Room 2.009

Organization:

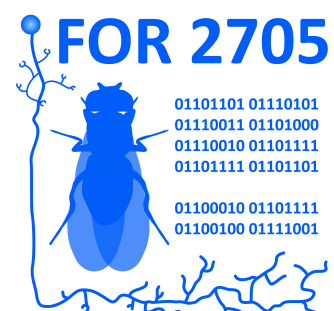
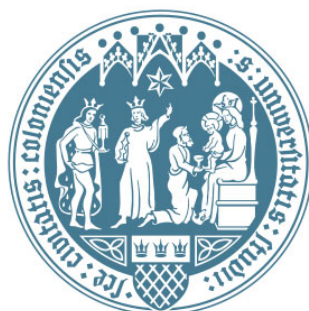
Computational Systems Neuroscience Group, Institute of Zoology, University of Cologne
www.computational-systems-neuroscience.de | @nawrot-group

Faculty:

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Schedule:

Daily 9:30 – 17:00. During the second week we might spontaneously adapt to your need for breaks and might finish later in the day. On Fri 21st we start only at 10:30.

February 2020		Scientific Program	Evening
Mon	10	Introduction to Python (variables, data structure, functions, files, etc.)	18:00 Kick-off Dinner, Brauhaus Sünner (Walfisch)
Tue	11	Useful scientific libraries (Numpy, Matplotlib, etc.)	
Wed	12	Practical exercise in Python	
Thu	13	Basic analyses of intracellular recordings: From spontaneous to evoked events I	
Fri	14	Basic analyses of intracellular recordings: From spontaneous to evoked events II	Drinks + Cansu's Carnival Survival Strategies
Sat	15	free	
Sun	16	Introduction to LIF neurons and solving ODEs numerically (Euler)	
Mon	17	Introduction to the neural network simulator Brian2	
Tue	18	Implementing a simple model of insect learning in Brian2 I	
Wed	19	Implementing a simple model of insect learning in Brian2 II	
Thu	20	Implementing extensions to the model	Carnival outing or 'Fastelovend'
Fri	21	Final presentations (starts at 10:30 and finishes at 15:00)	

Additional Information:

Lunch – during the daily lunch break we provide tickets for the student canteen (Mensa)

Kick-Off Dinner – we will cover food and non-alcoholic beverages; location: Walfisch, Salzgasse 13, 50667 Köln

Hotel – IBIS. Neue Weyerstraße 4, 50676 Köln

Data & Information:

Information and Code can be accessed at Github:

<https://github.com/nawrotlab/FORModelingCourse>

Data files and additional information can be found in a Dropbox folder with link:

<https://tinyurl.com/sktwhfy>