







Progetto EBRAINS-Italy - Missione 4, Componente 2, Linea di investimento 3.1 del PNRR Finanziato dall'Unione europea – NextGeneration EU (CUP B51E22000150006)







Workshop

The EBRAINS-Italy Research Infrastructure for Neuroscience challenges 02-04 December 2024--Villa Doria D'Angri, Napoli

03 December 2024

16:40-17:20 Hands-on training: Aula 11-PT, Modeling neuron dynamics with A-GLIF models: from experimental traces with constant current injections to predicted responses to synaptic inputs (E. Spera, CNR-IBF and C. Tribuzi, UNINA)

For this hands-on session, users need to have Python3.7 or later installed on their PC with the following libraries: joblib (for parallelization), - sympy, - numpy, - geneticalgorithm, - pickle, - scipy, - json, - matplotlib

16:40-17:20 Hands-on training: Aula Procida-1P, *Getting started with Cobrawap* (G. De Bonis and C. Lupo, INFN)

For this hands-on session, users need to have a recent version of Python 3 installed on their computer, along with either Conda or Virtualenv to set up the installation/execution environment (refer to the repository at https://github.com/APE-group/hands on cobrawap for more details)

17:20-18:00 Hands-on training: Aula Procida-1P, *Neural network activity visualization with virtual reality Headset* (S. M. G. Solinas, UNISS)

None

17:20-18:00 Hands-on training: Aula 11-PT, Realistic modelling of brain microcircuits: The Brain Scaffold Builder (F. Marchetti, UNIPV)

For this hands-on session, users need to have Python 3.9 or higher, Python3-venv, NEST (Install NEST NEST Simulator Documentation). Optional: openmpi

04 December 2024

15:30-16:30 Hands-on training: Aula Procida-1P, *STSimM: a new tool for evaluating neuron model performance and detecting spike trains similarity* (C.A. Lupascu, CNR-IBF and C. Tribuzi, UNINA)

For this hands-on session, users need to have Python3.8 or later.

15:30-16:30 Hands-on training: Aula 11-PT, *Data driven strategies for protein structure prediction and design* (F. Raimondi, SNS)

None



