

## PyRates

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Efficient software solutions for building and analyzing neural models are of tremendous value to the field of computational neuroscience.

In this tutorial we will introduce PyRates (<https://github.com/pyrates-neuroscience/PyRates>), an open source Python tool that allows for a generic model definition, large-scale network simulations and parallelized exploration of model parameter spaces. We will start the tutorial by giving a short theoretical introduction to neural modeling. Then, we will teach participants how to implement such models in PyRates and perform simulations of the model behavior. We will end the tutorial with an exploration of the dynamic behavior of a concrete neural model under changes of its control parameters."

### **Prerequisites:**

--basic programming knowledge

--some basic familiarity with ordinary differential equations