

SE Szentágothai Doktori Iskola, ELTE Biológia Doktori Iskola, Idegtudomány és humánbiológia program

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Zalányi László

Useful informations

The presentation material you can find on our website contains the description of the biological phenomena and the corresponding mathematical models we discussed during the lectures. It contains more than what we discussed so those who are interested can get a deeper look into the field. The goal of this part was to give you an overview of the field of phenomena which can be approached with the NEURON software as a modeling tool.

Beside the theoretical background of course we went through the basics of the software, the structure, menus etc. The maintainer of the software provides now a great documentation available on-line:

<https://neuron.yale.edu/neuron/docs>

Here I suggest you to start with the Tutorials.

For installation instructions see the page:

<https://neuron.yale.edu/neuron/download>

From the NEURON website you can reach the ModelDB:

<https://senselab.med.yale.edu/ModelDB/>

Here you can find a lot of different ion channel, chemical synapse, neuron and neural network models implemented not only in NEURON but in various programming languages used by scientists of the field. It is a very useful page to learn and also to start with and make some modifications for your own purposes.

Best Regards

Laszlo