



SFB 1286 Quantitative Synaptology

Seminar

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“Neurologistics “

Abstract:

Many structures of the brain, such as synapses, are made up of rather volatile parts which are turned over in a matter of a few days. This implies that the brain is facing immense logistics problems in producing, storing, and distributing these parts to different destinations and removing and recycling waste products. How are these processes organized to achieve stable and efficient function?

As an example, we present a mathematical model of local receptor trafficking. From generic assumptions, the model predicts multiplicative scaling and heterosynaptic plasticity of synapses competing for a limited supply of receptors.

Monday, 18. December 2017 at 14:15
seminar room 18 (E01.112)

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Hosted by Dr. Christian Tetzlaff