



Institute colloquium

# IST Colloquium: Design principles for dendritic inhibition

**Idan Segev**

The Hebrew University of Jerusalem

Host:

Five open questions about dendritic inhibition (I) will be discussed.

(i) Why I is distributed over the whole dendritic tree, far from the axonal output?

(ii) Why I on very distal branches?

(iii) Why different I-subclasses (basket, Chandelier, bi-tufted, etc.) cover different dendritic subdomain of its target neuron and why each I-axon often makes there 10-20 synapses?

(iv) Why, the 1/5 ratio between I/E in neocortex and hippocampus?

(v) Why do interneurons so reach in their firing repertoire? This analytical and modeling study provides new and counterintuitive insights into the effect of dendritic inhibition in controlling dendritic excitability and plasticity and in molding the neuron's output.

**Monday, September 24, 2012 04:30pm - 05:30pm**

Raiffeisen Lecture Hall, Central Building



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

Please find a schedule of the ISTA Shuttle on our webpage:

<https://ista.ac.at/en/campus/how-to-get-here/> The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.