

IGSN - COLLOQUIUM

Monday, November 23rd 2015 • 12:30

FNO – 01 / 117

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May the faculty of language emerge from a glassy phase transition?

In our group we have explored latching dynamics in simplified cortical networks as a model of spontaneous production, for example of sentences. Latching, or jumping from one attractor state to the next, emerges beyond a critical value of network connectivity, without any change or extra ingredient in organization, a clue to the possible evolutionary path of a cortex capable of sustaining language. In departing from the simplest model towards the complexity of real languages, however, we face the major effect of correlations and of the resulting disorder-dominated dynamics, which call for the refinement and application of statistical physics tools to linguistic data.

Host:

SEN CHENG

Mercator Research Group "*Structure of Memory*", Faculty of Psychology,
Ruhr University Bochum

Guests are welcome.

