

JENTSCHKE LECTURE.

DESY Lecture in memory of Willibald Jentschke

“How to simulate without a Computer – A Physics Approach to the Brain”

Prof. Dr. Karlheinz Meier
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The brain is a universe of 100 billion cells interacting through a constantly changing network of 1000 trillion synaptic connections. It runs on a power budget of 20 Watts and carries a rather complete model of our physical world. Understanding fundamental principles of the brain is among the key challenges for science. Traditional simulation approaches are mostly hindered by a huge energy gap of 14 orders of magnitude between supercomputer simulations and biological reality.

In the lecture we will discuss an approach to build a physical model of the brain as a tool for experimental tests of theories that attempt to describe the storage and processing of information in the brain. The lecture will focus on recent results but also give a short introduction to the planned work in the recently approved EU Human Brain Project.

30 October 2013
17:00 h, DESY Auditorium
Notkestraße 85 | 22607 Hamburg | Germany

More Information: www.desy.de/jentschke

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<http://vffd.desy.de>

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