

DIESE WOCHE

PHYSIKALISCHES KOLLOQUIUM

des Fachbereichs Physik
der Johann Wolfgang Goethe-Universität Frankfurt

Mittwoch, den 13.11.2013, 16 Uhr c.t.
Großer Hörsaal, Raum _0.111,
Max-von-Laue-Str. 1

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„ Complex dynamical Systems and our Brain “

Our brain is a complex dynamical system and an introduction to the basic concepts underlying its functionality, on a generic level, is given. We will then discuss the advantages of using generating functionals for the construction of complex and cognitive systems and discuss two examples based on information-theoretical concepts, the neural information entropy and the Fisher information for the synaptic flux operator. Discussing the results obtained for the respective neural networks we will argue, that generating functionals constitute a promising route for guiding self-organizational processes.

Die Dozenten der Physik

Kolloquium