Cologne Evolution Colloquium

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Large-scale simulations of primate cortex

High-level brain functions reside to a large extent in the cerebral cortex, the outer layer of the mammalian brain. Therefore, one of the Holy Grails of neuroscience is to understand the relationships between the structure, dynamics, and function of the cerebral cortex. One way of tackling the corresponding questions is to model and simulate biological neural networks. Focusing on the links between cortical connectivity and dynamics, I will present supercomputational simulation studies of macaque and human cortices. The models fulfill an integrative role by bringing together wide-ranging anatomical data, suggest mechanisms underlying the resting state of cortical dynamics, and serve as platforms for developing yet more detailed or extended models.

Wednesday, September 9, 2020, 17:00
Institute for Biological Physics, Zülpicher Str. 77a
Online via Zoom

Hosted by Michael Lässig

CRC 1310 Predictability in Evolution