Im Oberseminar

Deformationsquantisierung

spricht am **1. 12. 2016 um 14 Uhr c.t.,**

im Seminarraum 00.009 (Physik Ost)

Paul Stapor (Helmholtz-Zentrum München)

über das Thema:

Scalable Methods for Parameter Estimation in Systems Biology
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Blessing or Curse?

In this talk, we briefly present the concept of parameter estimation for mechanistic models in systems biology. The main part of this field consists of a setting up and solving a dynamical system (e.g. an ODE, PDE or DAE), which describes a certain biological process. Those dynamical systems usually depend on many parameters (e.g. reaction rates), for which no numerical values are known. Hence, an inverse problem must be solved, in order to estimate those parameter from measurement data. The main point in this context is, the bigger the mathematical models are, the more the solution of this inverse problem becomes computationally expensive. Hence, computationally efficient methods are an important field of study.

gez. Waldmann