



Center for  
Data and  
Simulation  
Science

# CDS SeminarSeries

WS18/19: 09.10|14.11.|**19.12.**|30.01.

Cologne School of Computational Biology

**Michael Nothnagel**

Cologne Center for Genomics

## **Pathway-induced allelic spectra of diseases**

We used extensive forward population simulations to explore the impact of three basic pathway motifs on the relationship between epidemiological parameters in comparison to the classical additive liability threshold model.

**Ronja Johnen**

CECAD Cologne

## **Parameterizing Network Propagation Algorithms for Omics Data Integration**

Network propagation is a systems biology approach with various applications such as prioritisation of disease genes and inference of condition-specifically altered sub-networks. In my presentation I will compare two network propagation algorithms, Random Walk with Restart and Heat Diffusion, by employing a wide range of parameters and demonstrating the existence of optimal spreading coefficients.

19 December 2018, 12:00

RRZK Conference room 1.03, Weyertal 121

Hosted by Achim Tresch (achim.tresch@uni-koeln.de)