



**Workshop**  
**Computational Methods for Networks**  
**9 and 10 November 2015**  
Center for Advanced Studies LMU Munich

**Monday, 9 November 2015**

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|---------------|--|
| 10:00         | Welcome QCSSC/CAS  |
| 10:15 – 11:15 | <b>Hendrik Zipse</b> (LMU Chemistry)<br>Hydrocarbon (Aut)Oxidation – reaction networks in seemingly trivial molecular transformations  |
| 11:15 – 11:45 | Coffee break   |
| 11:45 – 13:45 | <b>Thomas Seidl</b> (LMU Informatics)<br>Big Data Stream Analytics<br><b>Paul Thurner</b> (LMU Political Science)<br>The Network of Arms Transfers 1950-2013: An Application of ERGMs and TERGMs   |
| 13:45 – 14:45 | Lunch break  |
| 14:45 – 15:45 | <b>Mike West</b> (Duke Univ.; TUM Statistics)<br>Dynamic Sparsity Modelling  |
| 15:45 – 16:15 | Coffee break   |
| 16:15 – 18:00 | Postdoc Session:<br><b>Nils Detering</b> (LMU Mathematics)<br>Bootstrap percolation in directed, inhomogeneous random graphs and financial contagion<br><b>Sascha Rothe</b> (LMU CIS)<br>Similarity Measures on Wordgraph<br><b>Ziga Avsec</b> (LMU Gene Center)<br>Application of protein interaction network in causal gene prioritization |
| 18:30 – 19:30 | Public lecture: <b>Paul Embrechts</b> (ETH Zurich Mathematics)<br>Model Risk, Solvency, and Risk Aggregation   |
| 19:30         | Reception  |



## Tuesday, 10 November 2015

- 09:00 – 10:00      **Ulrik Brandes** (University Konstanz, Informatics)  
Measuring a Node's Position
- 10:00 – 10:30      Coffee break
- 10:30 – 11:30      **Christian Ochsenfeld** (LMU Chemistry)  
Schrödinger's World – Quantum Chemistry for Describing  
Molecular Systems
- 11:30 – 12:30      **Claudia Klüppelberg** (TUM Mathematical Statistics)  
Risk in a bipartite graph structure
- 12:30 – 13:00      Roundtable discussion (Moderation: Kauermann, LMU  
Statistics)
- 13:00                Workshop ends