BIOLOGICAL AND SOCIAL NETWORKS (SYBN)

veranstaltet vom Arbeitskreis Physik Sozio-Ökonomischer Systeme (AKSOE)
gemeinsam mit dem Arbeitskreis Biologische Physik (AKB),
dem Fachverband Chemische Physik und Polymerphysik (CPP)
und dem Fachverband Dynamik und Statistische Physik (DY)

Organisation
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The recent observation and study of complex network structures in the living world surrounding us, sparked an avalanche of research activity in the physics community. Examples are biological networks, spanning all scales from molecular communication networks in the genome, via neural networks to ecological food webs and species relationships. Other examples are the internet wiring and the World Wide Web, or social networks that range from email relationships to networks of sexual contacts. Methods from theoretical physics helped in understanding these systems, including new views on how epidemics spread on network structures, aspects of stability and robustness of communication networks, and are actively contributing to understanding the workings of our genome and complex diseases. The symposium presents a selected overview of this highly active field and sketches new perspectives for theoretical physics research in interdisciplinary applications.

ÜBERSICHT DER HAUPTVORTRÄGE UND FACHSITZUNGEN

(Hörsaal TU HE101)

Hauptvorträge

SYBN 1.1	Mo	09:45	(TU HE101)	**Computation, evolution and tinkering in complex networks**, Ricard Sole
SYBN 1.2	Mo	10:15	(TU HE101)	**Properties of attractors and relevant nodes in random Boolean networks**, Barbara Drossel
SYBN 1.3	Mo	10:45	(TU HE101)	**Epidemic modeling: dealing with complex networks**, Alessandro Vespignani
SYBN 1.4	Mo	11:15	(TU HE101)	**Traffic and Computation in Genetic Regulation**, Kim Sneppen

Fachsitzungen

SYBN 1	**Biologische und Soziale Netzwerke I**	Mo 09:45–11:45	TU HE101	SYBN 1.1–1.4
SYBN 2	**Biologische und Soziale Netzwerke II**	Mo 12:00–13:20	TU HE101	SYBN 2.1–2.4
SYBN 3	**Biologische und Soziale Netzwerke, Postersitzung**	Mo 14:00–15:30	Poster TU E	SYBN 3.1–3.34