

Eugene Wigner Colloquium

joint event of GRK 1558 and SFB 910



Prof. Dirk Helbing

Eidgenössische Technische Hochschule Zürich

“Can physics help to understand and fix society?”

Social systems may be viewed as complex multi-component systems. But given the cognitive features and the diversity of social agents, is it possible to develop explanatory theories of social phenomena, and if so, how? What are the potentials and limitations of a quantitative approach? And how to put social theories to the test, or apply them? What can physics contribute to the progress of this field? These questions will be addressed with examples from opinion formation, pedestrian, crowd, and traffic dynamics, as well as the emergence of social coordination, cooperation and norms. It will be shown that models of social phenomena can be used to create socio-inspired technologies, and to mitigate problems such as traffic jams, failures of financial systems, and conflicts. It will also be argued that many fields of physics, from mechanics, over kinetic gas theory and fluid dynamics, up to spin systems and renormalization theory could make fundamental contributions to revealing some of the most exciting (social) scientific puzzles of the 21st century.

Thursday, 23.11.17 · 16:15h · EW 202

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GRK1558
research training group