

Faculty of Physics
University of Vienna
Prof. Helmuth Hüffel



7th VIENNA CENTRAL EUROPEAN SEMINAR
ON PARTICLE PHYSICS AND QUANTUM FIELD THEORY

and

COST MP0801 WORKSHOP

November 26 - 28, 2010

COMPLEX STOCHASTIC DYNAMICS

PROGRAM

Lecture Hall: "Christian-Doppler-Hörsaal"

Faculty of Physics, University of Vienna

Strudlhofgasse 4, 3rd floor, 1090 Vienna

Nov. 26, 2010, Friday

10:00 - 10:05	<i>Helmuth Hüffel</i> (Vienna)	Opening Address
10:05 - 10:50	<i>Peter Talkner</i> (Augsburg)	Driven stochastic processes with metastable states: Fokker-Planck versus master equations
10:55 - 11:20		COFFEE
11:20 - 12:05	<i>Federico Ricci-Tersenghi</i> (Roma)	Complex stochastic dynamics in spin glasses and optimization problems
12:10 - 15:00		LUNCH
15:00 - 15:20	<i>Marcus Huber</i> (Vienna)	Genuine Entanglement in Complex Systems
15:25 - 16:10	<i>Stefan Thurner</i> (Vienna)	Entropies for Complex Systems
16:15 - 16:45		COFFEE
16:45 - 17:30	<i>Peter Schuster</i> (Vienna)	Complexity in Evolutionary Processes
17:35 - 17:55	<i>Rudolf Hanel</i> (Vienna)	Almost Linear Systems – A null-model for genetic regulatory networks
18:00 - 18:20	<i>Tomáš Lučivjanský</i> (Košice)	Reaction kinetics in the presence of synthetic velocity field
18:25 - 19:10	<i>Christian Beck</i> (London)	Complex behavior in chaotically quantized field theories
19:15 - 19:30		REFRESHMENTS
19:30 - 20:30	<i>Frank Schweitzer</i> (Zurich)	PUBLIC LECTURE: COMPLEX NETWORKS

Nov. 27, 2010, Saturday

10:00 - 10:45	<i>Janos Kertesz</i> (Budapest)	Dynamics of interactions in a large communication network
10:50 - 11:20		COFFEE
11:20 - 12:05	<i>Renaud Lambiotte</i> (London)	Multi-scale Modularity in Complex Networks
12:10 - 15:00		LUNCH
15:00 - 15:20	<i>Michael Szell</i> (Vienna)	Complex human mobility dynamics on a network
15:25 - 15:45	<i>Giovanni Petri</i> (London)	Local and nonlocal information in a traffic network: how important is the horizon?
15:50 - 16:10	<i>Taha Yasseri</i> (Budapest)	Linguistic-based analysis of Wikipedia: a complex systems approach
16:15 - 16:45		COFFEE
16:45 - 17:30	<i>Annick Lesne</i> (Paris)	Complex stochastic dynamics in the modeling of living systems
17:35 - 18:20	<i>Frank Schweitzer</i> (Zurich)	Modeling collective emotions: a stochastic approach based on Brownian agents
18:30 - ...		RECEPTION

Nov. 28, 2010, Sunday

10:00 - 10:45	<i>Dirk Helbing</i> (Zürich)	Noise and Society: A Directed Random Walk Towards an Elementary Theory of Social Systems
10:50 - 11:20		COFFEE
11:20 - 11:40	<i>Vinko Zlatić</i> (Zagreb)	Topologically biased random walk with application for community finding in networks
11:45 - 12:30	<i>Zdzislaw Burda</i> (Krakow)	Maximal Entropy Random Walk
12:35 - 12:40	<i>H. Hüffel</i> (Vienna)	Closing Remarks

Supported by:

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