

IV Summer School on Statistical Physics of Complex and Small Systems

IFISC, Palma de Mallorca, Spain (8-19 September, 2014)

First week September 8-12

	Monday	Tuesday	Wednesday	Thursday	Friday
9:00-10:15		P. Tarazona <i>Biophysical models for lipid membranes and proteins</i>			
10:15-10:45		Coffee Break			
10:45-12:00		A. Pikovsky <i>Theory of coupled oscillator dynamics</i>			
12:00-13:15		E. Hernández-García <i>Large-scale transport in oceans</i>			
13:15-15:00		13:00-14:30 Lunch	Lunch		
	14:30-15:00 Opening				
15:00-16:00	P. Tarazona <i>Biophysical models ...</i>	IFISC presentation	Keynote talk L. Schimansky-Geier	Tutorial C. Van der Broeck	Seminar R. Zambrini
16:00-16:10	Break				
16:10-17:10	A. Pikovsky <i>Coupled oscillators ...</i>	Hands on <i>Biophysical models ...</i>	Students 4 min talks	Hands on <i>Coupled oscillators...</i>	Hands on <i>Large scale transport ...</i>
17:10-17:30	E. Hernández-García <i>Large-scale transport ...</i>	Hands on <i>Coupled oscillators ...</i>	Hands on <i>Biophysical models ...</i>	Hands on <i>Large scale transport...</i>	
17:30-18:10					
18:10-18:50					

Keynote talk: *Active particles and their stochastic modelization*, Lutz Schimansky-Geier, Humboldt Universität, Berlin, Germany

Tutorial: *A short introduction to large deviations*, Chris van den Broeck, Universiteit Hasselt, Belgium

Seminar: *Synchronization, correlations and entanglement in quantum oscillators*. Roberta Zambrini IFISC (UIB-CSIC).

Locations:

- **Lectures:** Classroom 5, Antoni M. Alcover building.
- **Coffee breaks & poster sessions:** IFISC basement floor.
- **Seminars and Students' oral presentations:** IFISC seminar room.
- **Lunch:** Cafetería at Campus Sport.
- **Hands On sessions:** computer classroom AIMO15 on the 1st floor of Mateu Orfila building.

Second Week, September 15-19

	Monday	Tuesday	Wednesday	Thursday	Friday
9:00-10:15	9:30-10:30 Tutorial D. Sánchez	J. Ortín <i>Dynamics of flows in disordered media</i>			
10:15-10:45	10:30-11:00 Coffee Break	Coffee Break			
10:45-12:00	11:00-12:00 Talk R. López	D. Walgraef <i>Pattern formation: from Turing to nanoscience</i>			
12:00-13:15	12:00-13:15 Students 4 min talks.	V. M. Eguíluz <i>Interactions in complex systems: complex, multilayer and temporal networks</i>			
13:15-15:00	Lunch				
15:00-16:00	J. Ortín <i>Dynamics of flows ...</i>	Seminar T. Sintes	Seminar J.J. Ramasco	Seminar D. Gomila	
16:00-16:10	Break				
16:10-17:10	D. Walgraef <i>Pattern formation ...</i>	Hands on <i>Dynamics of Flows ...</i>	Hands on <i>Pattern formation ...</i> (D. Gomila)	Hands on <i>Complex networks ...</i> (J. Fernández)	
17:10-17:30	V. M. Eguíluz <i>Complex networks ...</i>				
17:30-18:10		Hands on <i>Complex networks ...</i> (J. Fernández)	Hands on <i>Dynamics of Flows ...</i>	Hands on <i>Pattern formation ...</i> (D. Gomila)	
18:10-18:50					

Tutorial: *Quantum transport in nanostructures*, David Sánchez, IFISC (UIB-CSIC).

Seminars:

- Monday: *Many-body effects at nanoscale* Rosa López, IFISC (UIB-CSIC).
- Tuesday: *Non-equilibrium growth processes applied to marine ecology*, Tomás Sintes, IFISC (UIB-CSIC).
- Wednesday: *Transportation networks: structure, organization and propagation phenomena*, José Javier Ramasco, IFISC (UIB-CSIC).
- Thursday: *Spatiotemporal dynamics of dissipative solitons*, Damià Gomila, IFISC (UIB-CSIC).