

**THE INTERNATIONAL WORKSHOP
COMPLEX SYSTEMS 2008
30/7 to 02/08 – LIT BUILDING – INPE – SJ CAMPOS-SP, BRAZIL
FINAL PROGRAMME**

Wednesday 30/7 (LIT-INPE)

9:30-9:45 - Opening Session

Chair: J.D.S. Da Silva

9:45-10:15 – R.R.Rosa: *The Meaning of Complexity in Science and Technology*

10:15-10:30- Coffee Break

10:30-11:05 - L. L. Oliveira: *Complex systems: an adaptability paradigm?*

11:05-11:40 - A. Rosas: *Observation of two-wave structure in strongly nonlinear dissipative granular chains*

11:40-12:15 - M. Hauser: *Manipulating scroll rings by an external electric current*

12:15-14:00-Lunch

Chair: R. Almeida

14:00-14:35- R. Viana: *Chaotic bursting synchronization in scale-free neuronal networks*

14:35-15:10- M. Karttunen: *Molecular interactions and (self)-assembly in soft matter systems*

15:10-15:45- T. Penna: *Multi-agent systems*

15:45-16:00- Coffee Break

16:00-16:35-H. Oliveira: *A Galerkin approach for the Bondi problem*

Chairs: L.S. Martins-Filho / E.L. Rempel

16:35-18:00-Short Comm. for Posters

[18:00-19:30- Welcome Cocktail](#)

Thursday 31/7 (LIT-INPE)

Chair: M. Hauser

9:00-9:35 F. da Silva: *Complex bulk and surface materials: morphological, optical and conduction investigations*

9:35-10:10 D. Bazeia: *Bifurcation, deformation and network of defect structures*

10:10-10:45 J. Pontes: *Hydrodynamic stability in electrochemical cells*

10:45-11:15 Coffee & Posters

11:15-11:50 I. Caldas: *Transport control through modified electric field profile*

11:50-12:25 M. Roberto: *Change of the magnetic field line topology by an ergodic limiter and its effect on the escape patterns*

12:25-12:30 Announcements

12:30-14:00 Lunch

Chair: A-C. L. Chian

14:00-14:35 M. Beimz: *Optimal transport in a Ratchet coupled to discrete bath: the role of Levy walks*

14:35-15:10 A Martinez : *Transition between extended and localized in deterministic and random walk with memory in disordered media*

15:10-15:45 H. Herrmann: *Apollonian systems*

15:45-16:15 Coffee & Posters

16:15-16:50 H.F.C. Velho: *Turbulent systems*

16:50-17:25 L. Lucena: *Complexity of petroleum systems*

17:25-18:00 PACIS Assembly

[18:00-19:00 Visiting LIT-INPE](#)

[19:00-21:00 Happy Hour Barbacue](#)

Friday 01/8 (LIT-INPE)

Chair: J. Pontes

9:00-9:35 F. Oliveira: *Anomalous diffusion, ergodicity and non-Gaussian behavior*

9:35-10:10 R. Almeida: *From bubbly liquids to dry soap froths*

10:10-10:45 P. Parris: *Effective medium theories for transport on partially-ordered complex networks and cell membranes*

10:45-11:15 Coffee & Posters

11:15-11:50 C. Prado: *The possible role of hysteresis in patchy stomatal conductance*

11:50-12:25 V.M. Kenkre: *Abrupt transitions from the Interplay of nonlinearity and spatial Inhomogeneity: bacteria populations and Rodent infections*

12:25-12:30 Announcements

12:30-14:00 Lunch

Chair: C. Prado

14:00-14:35 C. R. Neto: *An agent model for wealth distribution: the role of the State*

14:35-15:10 M. Rubi: *DNA looping: From loop formation to loop selection*

15:10-15:45 T. Marciano: *Ergodicity and central -imit theorem in systems with long-range interactions*

15:45-16:15 Coffee & Posters

16:15-16:50 R. Medrano: *Periodic windows: a homoclinic scenery*

16:50-17:25 E. Rempel: *Multi-stability in spatio-temporal chaos*

17:25-18:00 S. Ferraz Mello: *Chaos in Planetary Systems*

[20:30 - Conference Dinner](#)

Saturday 02/8 (IP&D - UNIVAP)

Chair: S. Ferraz Mello

9:00-9:35 E. Macau: *Controlling chaotic transient and the Improvement of system flexibility*

9:35-10:05 A Chian: *Phase synchronization driven by multiscale interactions in space plasma turbulence*

10:05-10:40 M. Bolzan: *Multifractal Analysis of the Interplanetary Magnetic Field Complex Variability*

10:40-11:00 Coffee Break

11:00-11:35 F. Ramos: *Extreme events in space and environmental phenomena*

11:35-12:10 G. Viswanathan: *Complexity: in between Markovian and deterministic dynamics*

12:10-12:30 Round Table on Complex Systems

12:30-12:45 Closing Session

[12:45-15:00 Special Trip and Lunch \(São Longuinho's Church\)](#)

17:00 – Departure to São Paulo