MAX-PLANCK-INSTITUT FÜR PHYSIK KOMPLEXER SYSTEME

PATTERN FORMATION IN COMPLEX FLUIDS AND BIOLOGY

Dresden, Germany • September 1 - 5, 1997

Poster Titles

Armand Ajdari	*Electrohydrodynamic effects*
Mathias Bode	*1. Emotional feedback in autonomous automata* *2. Particle-like solutions of 3-component reaction-diffusion systems*
Christopher Bowman	*A wavelet based algorithm for pattern analysis*
Sabine Brand	*Dispersion relation of the spreading depression in the chicken retina*
Till Bretschneider	*Modelling of Dictyostelium development*
Arnaud Chiffaudel	*Supercritical Eckhaus instability for traveling waves on their way to turbulence*
Dirk Drasdo	*A stochastic single cell approach to growing tumor spheroids*
Martin Falcke	*1. Impact of mitochondrial activity on the pattern formation in Xenopus laevis oocytes* *2. The dynamics of Dictyostelium development*
Georg Flätgen	*Controlling dispersive chaos*
Petra Foerster	*Spatial resolved studies of a dynamical molecular system in a miniaturized 2D-reactor*
Erwin Frey	*Statistical mechanics of semiflexible polymers and macromolecular networks*
Claus Fütterer	*Transient behaviour in Rayleigh-Benard with binary-mixtures*
Gerhard Gompper	*Freezing of fluid vesicles*
Wolfgang Hanke	*The retinal spreading depression - a model system for self-organisation in the CNS*
Michael Hildebrand	*Nanoscale selforganization phenomena in surface chemical reactions*
Thomas John	*to be announced*
Igor Kaganovich	*The self-separation of the multi-component plasma into regions with different ion compositions*
Royce H. Kam	*A biomechanical approach to unicellular algal growth*
Thomas Kirner	*Complex patterns in a cooperative amplification system*
Paul Kolodner	*Controlling dispersive chaos*

Natalia Komarova	*Nonlinear dynamics of sand waves and sand banks*
Micaela Krieger	*Stochastic difference differential equations at marginal stability*
L. Laurent	*Array of coupled jet instabilities*
Jürgen Lenz	*Stress patterns in simple many-particle-models of pneumatic biopolymer-network-biomembrane-assemblies*
Alexander Nepomnyashchy	*Non-potential effects in dynamics of hexagonal patterns*
Emmanuel Plaut	*Nonlinear dynamics of the in-plane direction in nematic liquid crystal convection*
Reinhard Richter	*Pattern formation of granular material in an annular channel*
Axel G. Rossberg	*Pattern formation from defect chaos - a theory of chevrons*
Francesc Sagues	*Pattern formation in quasi-two-dimensional electrodeposition*
Tatsunari Sakurai	*Switching flow waves induced in reaction-diiffusion-convection system*
Michael A. Scherer	*Spirals in sand*
Rainer Schmitz	*Domain pattern and taming of spiral defect chaos in a model for forced convection*
Udo Seifert	*Hydrodynamics of membranes*
Tomas Sintes	*Fluctuation-induced interaction of proteins in membranes*
Igor Sokolov	*Kinetics and pattern formation of* $A+B \rightarrow 0$ *reaction under mixing*
P. Stange	*Self-organizing molecular networks*
Andre Thess	*Scaling in turbulent Marangoni convection*
Clemens Utzny	*Transition to an effective medium and travelling waves in heterogeneous reaction-diffusion systems*
Henning Voss	*Estimation of partial differential equations from spatio-temporal data*
Fred Wolf	*What determines the density of topological defects in the visual cortex?*
Vladimir Zykov	*Controlling spiral waves by global feedback*