

**Festival de Théorie 2017** (June 26 - July 20)  
 "Avalanching & Self-Organization in Plasmas: 30 Years of BTW"

Tutorials	Week 1 June 26-30	Week 2 July 3-7	Week 3 July 10-13	Week 4 July 17-20	Title
<b>13</b>	<b>6</b>	<b>5</b>	<b>1</b>	<b>1</b>	
De Arcangelis Lucilla	27-Jun				Avalanches beyond power laws: temporal correlations in earthquakes, solar flares and brain activity
Diamond Pat		4-Jul			On the Physics of Avalanches in Drift Wave Turbulence: What's Buried in the Pile?
Fleischer Jason	28-Jun				Organizing and self-organizing photonic plasma
Frisch Uriel	27-Jun				Brief tutorial on differential geometry
Garbet Xavier			10-Jul		Dynamics of large scale convective cells driven by turbulence in fusion plasmas
Goldenfeld Nigel	26-Jun				Statistical mechanics of the phase transition to turbulence: zonal flows, ecological collapse and extreme value statistics
Hughes David		3-Jul			Dynamos driven by rapidly rotating convection with no inertia
Picozzi Antonio		5-Jul			Introduction to optical wave turbulence
Pocheau Alain	30-Jun				Pattern formation in the solidification of suspensions: the role of SOC
Pomeau Yves	29-Jun				Transition to turbulence explained by statistical physics
Tobias Steve		6-Jul			Direct Statistical Simulation in Transport Problems and Dynamos
Tobisch Elena		7-Jul			Exact and detuned resonances of drift/Rossby waves
Vergassola Massimo				17-Jul	Self-similarity and anomalous scaling
<b>Topical Overviews</b>					
<b>10</b>	<b>5</b>	<b>4</b>	<b>1</b>	<b>0</b>	
Abarzhi Snezhana			11-Jul		Hydrodynamic instabilities and interfacial and turbulence mixing
Besse Nicolas	27-Jun				Generalized Cauchy invariants and applications to hydrodynamics and MHD
Che Haihong		3-Jul			Langmuir Turbulence and Sturrock's Dilemma in Solar Physics
Görlner Tobias		5-Jul			From local to global gyrokinetic simulations: comparison with experiments and avalanche-type dynamics
Hahn Taik Soo		4-Jul			Avalanches, turbulence spreading and nonlocal transport in fusion plasmas
Sanchez Raul		6-Jul			Self-Organized Criticality and Radial Turbulent Transport in Fusion Plasmas
Shrira Victor	28-Jun				Evolution of random weakly nonlinear wave fields: the state of understanding
Sornette Didier	30-Jun				Beyond power laws: Dragon-Kings and the nature of extremes, statistical tools of outlier detection, generating mechanism, prediction and control
Sydora Rick	26-Jun				Avalanching and Self-organization in Pressure Striations: Experiments, Theory and Simulation
Tynan George	28-Jun				Turbulent driven zonal flows, intrinsic rotation, and profile self-organization in basic experiments
<b>Topicals</b>					
<b>20</b>	<b>5</b>	<b>9</b>	<b>4</b>	<b>2</b>	
Anderson Johan		6-Jul			Relaxation Dynamics of Avalanches
Biancalani Alessandro	29-Jun				Gyrokinetic investigation of zonal structures in tokamaks
Bœuf Jean-Pierre		4-Jul			Cross-field transport and instabilities in partially magnetized plasma – Application to plasma thrusters and to the negative ion source for the ITER NBI system
Brun Sacha	29-Jun				On magnetic flux structures formation and their emergence in stars
Dif-Pradalier Guilhem			11-Jul		Mesoscale Organisation in Magnetised Plasmas
Escande Dominique		3-Jul			Density limit in fusion plasmas as self-organization
Guo Zhibin		4-Jul			Fluctuation-induced bistability: A model of heat flux hysteresis and avalanching in confined plasmas
Gürçan Özgür				18-Jul	Nested Polyhedra Models for turbulence
Idomura Yasuhiro		5-Jul			Self-organization of plasma turbulence
Imadera Kenji		5-Jul			Avalanching and mean flows in flux-driven gyrokinetic turbulence
Janvier Miho	29-Jun				Self-organization during solar flares: from loss of equilibrium to current layers and reconnection in a 3D model
Kosuga Yusuke			11-Jul		Self-organization in parallel velocity gradient driven turbulence
Lesur Maxime		3-Jul			Fine scale structures in energy space in hot plasma turbulence
Milovanov Alexander			13-Jul		Self-organized critical vs bursting behavior in complex systems
Nicolas Timothée		6-Jul			Self-collision algorithms for Fokker-Planck operator simulation in full-f PIC codes and direct verification of classical transport
Rasmussen Jens Juul			13-Jul		Nonlocal effects in transport – the role of turbulence spreading
Sasaki Makoto	29-Jun				Topological bifurcation of turbulence driven flows in magnetized plasmas
Smolyakov Andrei		7-Jul			Momentum transport & MHD
Strugarek Antoine	27-Jun				Sandpile models and solar flares: applicability and predictive potential
Zaroso David				18-Jul	Energetic particles and turbulence using full-f global flux-driven gyrokinetic simulations
<b>Short contributions</b>					
<b>7</b>	<b>1</b>	<b>4</b>	<b>4</b>	<b>2</b>	
Asahi Yuuichi		7-Jul			Robustness of self-organised criticality behaviours in flux driven full-F gyrokinetic simulations
Choi Gyung Jin			12-Jul		3D magnetic field effect on zonal flows in tokamak plasmas
Colyer Greg		7-Jul			Some interesting features of zonally structured turbulence in MAST ETG and elsewhere
Fan Xiang		7-Jul			Cascades, "Bloby" Turbulence and Target Pattern Formation in Elastic Systems: A New Take on Classic Themes in Plasma Turbulence
Guo Weixin			12-Jul		Impact of impurities on zonal flow driven by trapped electron mode turbulence
Li Jiacong				18-Jul	Competition of Mean Perpendicular and Parallel Flows in a Linear Device
Migliano Pierluigi			12-Jul		An improved approximation for the analytical treatment of instabilities in tokamaks
Morel Pierre			12-Jul		Reduced Models of Turbulence: Logarithmically Discretized Models
Sato Naori	29-Jun				Self-organization of macroscopic structures & entropy production in conservative systems with topological constraints
Widmer Fabien		7-Jul			Turbulent Sub-Grid Scale Model for Fast Reconnection
Zhang Boyu				18-Jul	Experimental Study of Perturbation Particle Transport in the HL-2A Tokamak
<b>Lectures</b>	(primarily for students - some may be open to all)				
<b>11</b>	<b>5</b>	<b>5</b>	<b>1</b>	<b>0</b>	
De Arcangelis Lucilla	27-Jun				
Diamond Pat		4-Jul			Basic Ideas of Fronts, Pulses and (some) Nonlinear waves
Fleischer Jason	28-Jun				
Ghendrih Philippe			13-Jul		Quasi-Linear Theory
Goldenfeld Nigel	26-Jun				Turbulence as a problem in non-equilibrium statistical mechanics
Hughes David		3-Jul			
Picozzi Antonio		5-Jul			
Pocheau Alain	30-Jun				
Pomeau Yves	29-Jun				Transition to turbulence explained by statistical physics
Tobias Steve		6-Jul			A brief introduction to statistical methods for PDEs and ODEs
Tobisch Elena		7-Jul			What is a detuned resonance?