

PROGRAMME FOR THE
JOINT VARENNA - LAUSANNE INTERNATIONAL WORKSHOP
"THEORY OF FUSION PLASMAS"

Villa Monastero, Varenna, Italy
29 August -2 September 2016

SUNDAY August 28, 2016

15:00 - 19:00 Registration in Villa Monastero

MONDAY, August 29, 2016

9:00	<i>Welcome</i>	<i>M. Lontano / G. Gorini</i>
9:10	B. Lyons	Extended magnetohydrodynamic insights into edge-localized mode suppression/mitigation by three-dimensional magnetic perturbations
9:55	D. Ryan	Modelling-based high β_N RMP spectrum optimization for ELM mitigation
10:40	<i>Coffee break</i>	
11:10	A. Merle	Pedestal properties of H-modes with negative triangularity using the EPED model
11:55	S. Saarelma	Non-local analysis of kinetic ballooning modes in pedestal
12:40	<i>Group Photo in Villa Monastero's garden</i>	
12:50	<i>Lunch</i>	
15:00	O. Février	MHD simulations of magnetic island stabilization
15:45	J. Loizu	3D MHD equilibria with current sheets, magnetic islands, and chaos in stellarators and tokamaks
16:30	<i>Coffee break</i>	
17:00	M. Furukawa	Simulated annealing for computing stationary state of ideal MHD
17:45	<i>end</i>	
19:30	Pre-dinner Welcome Party (<i>Hotel Villa Cipressi</i>)	

TUESDAY, August 30, 2016

9:00	A. Cardinali	Quasilinear Analysis of Lower Hybrid Current Drive in ITER and DEMO
9:45	Y. Kazakov	Applications of Three-Ion ICRF Heating for ITER
10:30	<i>Coffee break</i>	
10:45	J. Faustin	The challenge of auxiliary fast ion tail generation in Wendelstein 7-X
11:30	A. Yu. Popov	Explanation of anomalous backscattering and absorption in second harmonic ECRH experiments by low-threshold two plasmon decay
12:15	<i>Lunch</i>	
14:00	Poster session: P1 - P20 in Villa Monastero + Ppd1-2	
15:00	<i>Coffee break</i>	
17:00	<i>end poster session</i>	
17:50	Meeting point for tour+conference dinner: main square (Piazza S. Giorgio, in front of the Hotel Royal Victoria)	
18:00	Trip on boat	
19:15	Aperitive and dinner at Grand Hotel Cadenabbia	

WEDNESDAY, August 31, 2016

9:00	N. Tronko	Verification of Gyrokinetic codes: theoretical background and applications
9:45	J. Citrin	Multi-channel flux-driven quasilinear turbulent transport prediction over many confinement times
10:30	B. Baiocchi	Simulations of ITER H-mode scenarios using the new generation of quasi-linear models
11:15	<i>Coffee break</i>	
11:35	P. Niskala	Coupling experimental and computational studies of the isotope effect in turbulent particle transport
12:20	M. Nunami	Simulation studies on turbulent transport of multi-ion-species plasmas in helical systems
13:05	<i>Lunch</i>	

THURSDAY, September 1, 2016

9:00	B. Dudson	Predictive modelling of turbulence and transport in the edge plasma of magnetic confinement devices
9:45	D. Hatch	Gyrokinetic simulations of the JET-ILW pedestal
10:30	<i>Coffee break</i>	
11:00	C. Wersal	Impact of neutral atoms on plasma turbulence in the tokamak edge region
11:45	M. V. Umansky	Plasma Flows and Detachment in Innovative Divertor Configurations
12:30	<i>Lunch</i>	
15:00	Poster session: P21 - P38 + P-pd3-4 in Villa Monastero	
16:00	<i>Coffee break</i>	
18:00	<i>end poster session</i>	
18:50	Piano concert at Villa Cipressi	
20:00	After-concert Party (<i>Hotel Villa Cipressi</i>)	

FRIDAY, September 2, 2016

9:00	A. Biancalani	Nonlinear interplay of Alfvén instabilities and energetic particles in tokamaks
9:45	M. Fitzgerald	TAE-induced alpha-particle transport in the Q=10 ITER baseline scenario
10:30	<i>Coffee break</i>	
11:00	H. Smith	Neoclassical toroidal viscous torque due to non-axisymmetric magnetic fields in tokamaks
11:45	J. Ball	Up-down asymmetric designs for tokamaks that drive large intrinsic rotation
12:30	<i>Closing session</i>	
12:40	<i>end</i>	

	Last Name	First Name	Title
P-1	Albert	Christopher	Kinetic modeling of 3D equilibria in a tokamak
P-2	De Blank	Hugo	Radially resolved bifurcation theory for L-H transition dynamics
P-3	Di Troia	Claudio	Non-perturbative relativistic guiding center transformation: exact magnetic moment and the gyro-phase proposed as the Kaluza-Klein 5th dimension
P-4	Graves	Jonathan	Non-axisymmetric zonal flows in axisymmetric plasmas
P-5	Lanti	Emmanuel	Padé approximation of the adiabatic electron contribution to the gyrokinetic quasi-neutrality equation in the ORB5 code
P-6	Migliano	Pierluigi	Analytical analysis of the linear ITG-mode instability in gyrokinetic theory
P-7	Nicolau	Javier	Correlations and non-local transport in a critical-gradient fluctuation model
P-8	Ohana	Noé	Towards the Optimization of a Gyrokinetic Particle-in-Cell (PIC) Code on Large Scale Hybrid Architectures
P-9	Rath	Florian	Comparison of gradient and flux driven gyro-kinetic turbulent transport
P-10	Paruta	Paola	A flexible numerical scheme for simulating plasma turbulence in the tokamak scrape-off layer
P-11	Brunetti	Daniele	Role of infernal modes dynamics and plasma rotation on the onset of NTMs
P-12	Kim	Juhyung	Numerical calculations of plasma response to external magnetic perturbations in tokamas
P-13	Marx	Alain	Free Boundary simulations with the XTOR-2F code
P-14	Raghunathan	Madhusudan	Following Heavy Impurities in 2D and 3D Ideal MHD Equilibria with Subsonic Toroidal Flows
P-15	Helander	Per	Runaway electrons during a coil quench in W7-X?
P-16	Teplukhina	Anna	Numerical optimization of ramp-down phases for TCV and AUG plasmas
P-17	Khan	Shabbir Ahmad	Kinetic full wave modeling using the integral operator approach in fusion plasmas
P-18	Vallejos	Pablo	An iterative method to include spatial dispersion for waves in inhomogeneous plasma using wavelet decomposition
P-19	Guidi	Lorenzo	Cross-polarization scattering of diffracting electron-cyclotron beams in a turbulent plasma with the WKBeam code
P-pd1	Del Sarto	(Ottaviani M.)	Secondary fast reconnecting instability in the sawtooth crash
P-pd2	Grosshauser	Stefan	Role of linear dynamics in saturated gyro-kinetic turbulence
P-21	Buchholz	Rico	Influence of centrifugal effects on particle and momentum transport in NSTX
P-22	Di Siena	Alessandro	Non-Maxwellian background effects in gyrokinetic simulations with GENE
P-23	Garbet	Xavier	On the relationship between zonal flow residuals and bump-on tail saturated instabilities
P-24	Kim	Sung Sik	Gyrofluid Simulations of Ion Temperature Gradient Driven Turbulence in a Tokamak using BOUT++
P-25	Mariani	Alberto	Characterization with microturbulence simulations of the zero particle flux condition in case of a TCV discharge showing toroidal rotation reversal
P-26	Nicolas	Timothée	A novel approach to ion-ion Langevin collisions in PIC modules applied to hybrid MHD codes
P-27	Oberparleiter	Michael	Uncertainty estimation and a stopping rule in nonlinear gyrokinetic simulations
P-28	Tegnered	Daniel	Fluid and gyrokinetic modelling of particle transport in plasmas with hollow density profiles
P-29	Weikl	Arne	Ion temperature gradient turbulence close to the nonlinear threshold
P-30	Lanthaler	Samuel	Higher order Larmor Radius corrections to guiding-centre equations and application to fast ion equilibrium distributions
P-31	Stahl	Adam	A non-linear relativistic solver for runaway-electron dynamics
P-32	Valade	Laurent	Modelling of particle dynamics in front of LH antennas
P-33	Wilkie	George	Global anomalous transport of ICRH-heated minority ions and helium ash
P-34	Li	Li	Screening of external magnetic perturbation fields due to sheared plasma flow
P-35	Ichiguchi	Katsuji	Three-dimensional numerical analysis of global flow effects on MHD stability in heliotron plasmas
P-36	Momo	Barbara	Island-induced electric field modification: the TJ-II case
P-37	Omotani	John	Edge rotation from momentum transport by neutrals
P-38	Shanahan	Brendan	X-point modelling in BOUT++ and the extension to nonaxisymmetric geometries
P-pd3	Ottaviani	Maurizio	Applications of asymptotic-preserving (AP) methods to plasma dynamics simulations at realistic dimensionless parameters
P-pd4	Silvagni	Davide	Bispectral Analysis: Comparison of Two Windowing Functions