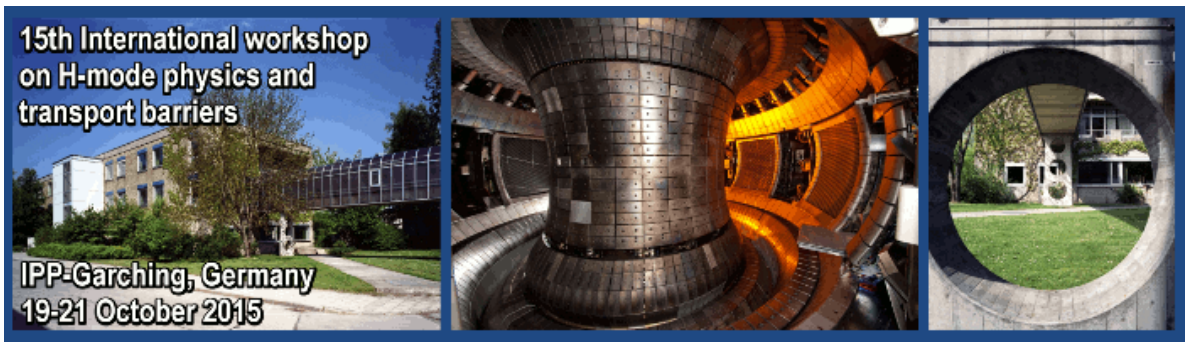

Agenda

Monday, 19.10.2015 – morning session

9:00 – 9:05 E. Wolfrum, Welcome

Topic 1: Development of reactor relevant scenarios: key physics and operational aspects

Chair: S. Lebedev

9:05 – 10:35 **A. Loarte, main speaker**
P. Lang
T. Luce

10:35 – 11:00 Coffee break

11:00 – 12:30 **Poster session**

M1	Adamek	Fast measurements of heat flux in ELM filaments in SOL and divertor region on the COMPASS tokamak.
M2	Angioni	Predicted dependence of turbulent tungsten diffusion on electron and ion heat fluxes and comparative analysis of the impact of turbulence on tungsten transport in ASDEX Upgrade and JET H-mode plasmas
M3	Fable	Selected transport studies of a tokamak–based DEMO fusion reactor
M4	Garofalo	The DIII-D high poloidal beta scenario for a Steady State Tokamak Reactor
M5	Idomura	Full-f gyrokinetic simulation including kinetic electrons
M6	Komm	Systematic measurements of pedestal parameters in COMPASS tokamak
M7	Lang	Controlled operation in the high density H-mode scenario
M8	Luce	Impact of Electron Heating and Reduced Torque on Confinement and Stability in DIII-D ITER Baseline Scenario Demonstration Plasmas
M9	Perez von Thun	Pedestal MHD stability at JET – an experimentalist's view
M10	Peterka	First pedestal MHD stability analysis of H-modes in COMPASS tokamak
M11	Polevoi	Analysis of fuelling requirements in ITER H-modes with SOLPS-EPED1 derived scalings
M12	Snyder	Prediction, Testing and Optimization of the Pedestal and the Coupled Pedestal-Core System for Reactor Relevant Scenarios
M13	Somjinda	Self-Consistent Modeling of ITER and DEMO with the Integrated Predictive Modeling Code BALDUR

Monday, 19.10.2015 – afternoon session

Topic 2: Turbulence in edge and core transport barriers, new experimental results and modelling

Chair: T.S. Hahm

14:00 – 15:30 **T. Tokuzawa, main speaker**
S. Neudatchin
B. Grierson
S.I. Itoh

15:30 – 16:00 Coffee break

16:00 – 17:30 **Poster session**

A1	Chapman	The global build-up to intrinsic ELM bursts and comparison with pellet precipitated ELMs seen in JET
A2	Ding B	Lower hybrid current drive related to H-mode in EAST
A3	Ding S	Formation of Large-Radius ITB in High Beta Low Torque Scenario with q_{min} Above 2
A4	Gao	Pedestal evolution and edge turbulence on EAST tokamak
A5	Grierson	Successes and Challenges of Modeling Steady-State High Poloidal Beta Discharges on DIII-D
A6	Imadera	ITB formation in gyrokinetic flux-driven ITG turbulence with toroidal momentum injection
A7	Inagaki	Observations of Fine Flow Structures and Related Turbulence Dynamics in Edge Region of LHD
A8	Itoh S.I.	Transport Hysteresis of Core Plasma and H-mode Physics
A9	Kanjanaput	Simulation of Neoclassical Tearing Modes in JET and DIII-D
A10	Kasuya	Analysis of 2-Dimensional Transport Mechanism in a Toroidal Plasma Turbulence Simulation
A11	Lahazi	Investigation of MHD activity and plasma edge behavior by applying helical magnetic field and limiter bias.
A12	Lashkul	Effect of the transition to improved core confinement observed in the LHCD experiment at FT-2 tokamak
A13	McKee	Core Turbulence Response to Controlled ExB Shear Variation in Advanced-Inductive Plasmas
A14	Miyato	Effects of tubulence on the edge-core coupling in tokamak plasmas with transient edge source/sink
A15	Neudatchin	Local and non-local formation of the ITB near the q=1 surface in ECRH/ECCD and OH experiments at T-10 Tokamak
A16	Onjun	Micro-instability analysis of pellet fueled discharge in H-mode JET tokamak
A17	Pankin	Anomalous Transport in the Alcator C-Mod H-mode Pedestal
A18	Viezzer	Impact of ELMs on edge rotation, momentum confinement and ion heat transport in ASDEX Upgrade

18:30 **Tour to ASDEX Upgrade**

Tuesday, 20.10.2015 – morning session

Topic 3: Impact of magnetic perturbations on ELMs and ETB structure

Chair: X. Gao

9:00 – 10:30 **R. Nazikian, main speaker**
M. Willensdorfer
Y. Liang
Ja. Kim

10:30 – 11:00 Coffee break

11:00 – 12:30 **Poster session**

M1	Callen	Effects of resonant 3-D magnetic fields on pedestals
M2	Held	Applications of continuum drift kinetics in NIMROD
M3	Ida	Impact of magnetic island and stochastic magnetic field on plasma flow
M4	Kim Ja	ELM crash suppression by mixed non-axisymmetric fields in KSTAR
M5	Kim Ju	Role of collisionality on plasma response to external magnetic perturbation in tokamaks
M6	Leconte	Drive of a mesocale Vortex-Flow pattern by coupling to Zonal-Flows in presence of Resonant Magnetic Perturbations
M7	Orain	Non-linear modeling of the plasma response to RMPs in ASDEX Upgrade: towards quantitave predictions for the ELM mitigation with JOREK
M8	Rozhansky	Change of the radial electric field by magnetic perturbations and impact on pedestal
M9	Singh	Enhancement of High-k Fluctuations by External Magnetic Field Perturbations as a Mechanism for ELM Mitigation
M10	Sun/Liang	New results on RMP ELM suppression in EAST
M11	Willensdorfer	3D Effects and plasma response measurements of non-axisymmetric magnetic perturbations on ASDEX Upgrade via ECE
M12	Xu	Nonlinear multi-scale multi-physics simulations of a full ELM cycle

Tuesday, 20.10.2015 – afternoon session

Topic 4: ELM-free, small-ELM regimes including I-mode, QH-mode

Chair: R. Maingi

14:00 – 15:30 **A. Hubbard, main speaker**
A. Garofalo, main speaker
F. Ryter
X. Chen
J. King

15:30 – 16:00 Coffee break

16:00 – 17:30 **Poster session**

A1	Aiba	Impact of ion diamagnetic drift effect on MHD stability at edge pedestal of rotating tokamaks
A2	Bortolon/Maingi	High Frequency ELM Pacing by Lithium Pellet Injection on DIII-D
A3	Chen	New Discoveries in QH-mode Plasmas from Experimental and Numerical Studies on DIII-D
A4	Golfinopoulos	The Shoelace Antenna: An Actuator to Induce Continuous Edge Fluctuations on Alcator C-Mod
A5	Hubbard	Access conditions for the I-mode regime on Alcator C-Mod and prospects for extrapolation
A6	King	NIMROD Modeling of QH-mode: Reconstruction Considerations and Saturation Mechanism
A7	Liu	Nonlinear MHD simulations of QH-mode plasmas in DIII-D
A8	Ryter	I-mode studies at ASDEX Upgrade: L-I and I-H transitions, confinement and pedestal properties
A9	Walk	Impact of the Pedestal on Global Performance and Confinement Scalings in I-mode

18:30 **Conference Dinner at Gasthof Neuwirt in Garching**

Wednesday, 21.10.2015 – morning session

Topic 5: H-mode transition dynamics; role of flow-turbulence interaction

Chair: K. Ida

9:00 – 10:30 **L. Schmitz, main speaker**
M. Cavedon
K. Itoh
G. Staebler
M.A. Malkov

10:30 – 11:00 Coffee break

11:00 – 12:30 **Poster session**

M1	Birkenmeier	The magnetic structure of the I-phase at ASDEX Upgrade
M2	Cavedon	Radial electric field dynamics at the L-H and H-L transition on ASDEX Upgrade
M3	Cheng	Reduction of heating power for accessing the H-mode with a kink-like MHD crash in the HL-2A tokamak
M4	Cziegler	Nonlinear Interactions and Transitions of Edge Transport-Barrier Regimes
M5	Hahm	E x B Shearing of Tilted Turbulent Eddys and Its Dependence on Diverted Plasma Configurations
M6	Hughes	Access to high-confinement regimes on Alcator C-Mod and the complex influence of divertor geometry
M7	Itoh K.	Origin and structure formation of solitary radial electric field in the H-mode
M8	Kim S	Self-consistent Electromagnetic Simulations of Edge Transport Barrier Formation in Tokamaks
M9	Kobayashi	Characteristics of low frequency oscillation during L-H dithering phase in high density plasmas of Heliotron J
M10	Lebedev	Pellet triggered LH transition in the TUMAN-3M
M11	Malkov	Physics of the Power Threshold Minimum for L-H Transition
M12	Solano	Magnetic Oscillations near L-H transition: experimental observations and comparisons with MHD theory
M13	Staebler	The Role of the Viscous Boundary Layer in the H-mode Threshold
M14	Thome	Near-Unity Aspect Ratio H-mode and ELM Studies
M15	Wu	The formation, maintenance and collapse of the negative radial electric field during the L-H transition

Wednesday, 21.10.2015 – afternoon session

Topic 6: Influence of impurities and divertor conditions on transitions, pedestal and ELMs

Chair: G. Saibene

14:00 – 15:30 **M. Dunne, main speaker**
C. Giroud
L. Frassinetti

15:30 – 16:00 Coffee break

16:00 – 17:30 **Poster session**

A1	Ahn	Effect of varying number of ELM filaments on the behavior of the divertor heat flux profile.
A2	Buangam	Behaviors of impurity in standard H-mode discharges and H-mode discharges with the presence of ITB in JET and DIII-D
A3	de la Luna	Type I ELM characterization in JET with the ITER-like wall
A4	Diallo	Pedestal Saturation and the Onset of the Quasi-Coherent Fluctuations between ELMs on the DIII-D tokamak
A5	Frassinetti	ELM energy losses in AUG with & without Nitrogen seeding
A6	Giroud	Effect of nitrogen and neon seeding in confinement and pedestal structure in JET with carbon and Be/W wall
A7	Jhang	Role of zonal flow in the edge pedestal collapse
A8	Leyland	The inter-ELM evolution of electron temperature and density H-mode pedestal profiles on JET with a metallic wall
A9	Maingi	Bifurcation to Expanded H-mode Pedestal Width and Improved Performance with Lithium Injection into DIII-D Discharges with Pre-existing Pedestal Localized Instabilities
A10	Stefanikova	Effect of Helium on pedestal and stored energy in JET-ILW
A11	Sytova	Impact of detached divertor on the pedestal region
A12	Urano	Extended pedestal width in JET H-mode plasmas with a metallic Be/W wall