

Tuesday, Sept. 12th

08:00 - 08:45 Registration (also possible during breaks and poster session)

08:45 - 09:00 Welcome & practical infos

09:00 - 10:35 Near-edge physics in L-mode, H-mode and ELM-free regimes

09:00 - 09:45 › Understanding of near-edge physics in L-mode, H-mode and ELM-free regimes progress in validation, core/edge integration, role of particle source - *Clarisse Bourdelle*

09:45 - 10:10 › Gyrokinetic modelling of the radial electric field well in L-mode edge tokamak plasmas - *Yanick Sarazin*

10:10 - 10:35 › Pedestal turbulence in AUG and JET from a global gyrokinetic perspective - *Leonhard Leppin*

10:35 - 11:05 Coffee break

11:05 - 12:35 Near-edge physics in L-mode, H-mode and ELM-free regimes

11:05 - 11:30 › Edge deuterium temperature and toroidal rotation profiles at the ASDEX Upgrade tokamak and comparison to theory - *Pilar Cano Megías*

11:30 - 11:55 › Drift wave nature of the Weakly Coherent Mode on ASDEX Upgrade - *Manuel Herschel*

11:55 - 12:35 › Discussion session

12:35 - 14:20 Lunch

14:20 - 16:20 Poster session 1

16:05 - 16:35 Coffee break

16:35 - 18:20 Confinement optimisation through shaping: negative triangularity

16:35 - 17:00 › Initial Transport Results of the DIII-D Negative Triangularity Campaign - *Max Austin*

17:00 - 17:25 › Investigation of Turbulence Properties in Negative Triangularity Plasmas on DIII-D using Beam Emission Spectroscopy - *Samuel Stewart*

17:25 - 17:50 › Pedestal properties of negative triangularity plasma in ASDEX Upgrade - *Branka Vanovac*

17:50 - 18:20 › Discussion session

Wednesday, Sept. 13th

08:45 - 10:20 SOL/divertor transport and exhaust

08:45 - 09:30 › Overview on modelling of edge-SOL transport - *Wladimir Zholobenko*

09:30 - 09:55 › Self-consistent simulations of plasma turbulence and neutral dynamics in detachment regime - *Davide Mancini*

09:55 - 10:20 › Influence of self-consistently determined perpendicular transport coefficients on the numerical prediction of turbulent transport in a full WEST discharge - *Ivan Kudashev*

10:20 - 10:50 Coffee break

10:50 - 12:40 SOL/divertor transport and exhaust

10:50 - 11:15 › Development of full-f gyrofluid simulations for edge turbulence and magnetic reconnection - *Franz Ferdinand Locker*

11:15 - 12:00 › Injection of low-Z powders: a novel actuator to control pedestal, heat exhaust and plasma wall interaction - *Alessandro Bortolon*

12:00 - 12:40 › Discussion session

12:40 - 14:25 Lunch

14:25 - 16:25 Poster session 2

16:10 - 16:40 Coffee break

16:40 - 18:50 Confinement optimisation through shaping: spherical tokamaks

16:40 - 17:05 › Mitigating uncertainty in integrated scenario design for the STEP prototype powerplant - *Francis Casson*

17:05 - 17:30 › Turbulent transport in the core of high-beta spherical tokamaks and predictions for STEP - *Maurizio Giacomini*

17:30 - 17:55 › Pedestal stability analysis of MAST-U H-mode plasmas and impact of plasma shaping parameters - *Koki Imada*

17:55 - 18:20 › Initial results of gyrokinetic analysis of the core plasma in MAST Upgrade - *Bhavin Patel*

18:20 - 18:50 › Discussion session

19:00 - 22:30 Gala Dinner

Thursday, Sept. 14th

09:15 - 10:50 Impurities from SOL to edge to core

- 09:15 - 10:00 › From the core to the divertor: Status of the impurity transport investigations at Wendelstein 7-X - *Felix Reimold*
- 10:00 - 10:25 › Increasing the predictive capability of impurity densities and their effects in tokamaks with integrated modeling based on theoretical transport models - *Daniel Fajardo*
- 10:25 - 10:50 › Experimental impurity transport studies for the plasma edge in different confinement regimes at ASDEX Upgrade - *Tabea Gleiter*

10:50 - 11:20 Coffee break

11:20 - 12:10 Core transport

- 11:20 - 11:45 › An algorithmic framework for developing saturation rules in reduced core transport models - *Harry Dudding*
- 11:45 - 12:10 › Integrated modelling of ohmic ramp-up at TCV - *Michele Marin*

12:10 - 12:45 Discussion on both topics: Impurities & Core transport

12:45 - 14:30 Lunch

14:30 - 16:30 Poster session 3

16:15 - 16:45 Coffee break

16:45 - 18:30 Core transport

- 16:45 - 17:10 › Excitation of high frequency waves in non-linear 6D kinetic Vlasov simulation with steep gradients - *Mario Raeth*
- 17:10 - 17:35 › Applying self-consistent electron heat transport and ECH deposition profile estimation in DIII-D - *Jelle Slief*
- 17:35 - 18:00 › Experimental validation of momentum transport theory in the core of a tokamak plasma - *Carl Friedrich Benedikt Zimmermann*
- 18:00 - 18:30 › Discussion session

18:30 - 18:45 Presentation of the candidates for TTF vice-chair

Friday, Sept. 15th

08:45 - 10:20 Physics of burning plasmas

- 08:45 - 09:30 › Overview of JET T and D-T experiments - *Jörg Hobirk*
- 09:30 - 09:55 › Advanced energetic particle transport models - *Matteo Valerio Falessi*
- 09:55 - 10:20 › Impact of supra-thermal particles on plasma performances at ASDEX Upgrade with GENE-Tango simulations - *Alessandro Di Siena*

10:20 - 10:30 EU participants vote for new TTF vice-chair

10:30 - 11:00 Coffee break

11:00 - 11:10 Election results

11:10 - 12:15 Physics of burning plasmas

- 11:10 - 11:35 › Experimental assessment of the role of the main ion species composition on the access into H-mode - *Ulrike Plank*
- 11:35 - 12:15 › Discussion session

12:15 - 12:30 PhD poster prize

12:30 - 12:45 Wrapping and closing words

12:45 - 14:00 Lunch

14:30 - 16:00 Technical tour of the host lab IJL, including the plasma device SPEKTRE

 Invited (30' + 15')

 Contributed (15' + 10')



TTF2023
annual meeting