OP2.1-OP2.2 Electrostatic core turbulence proposals





Purpose

- Ensuring all proposal requirements are met and proposals are submitted on time
- Transparent development and sharing of information
- Identify gaps in current experimental plan

Current timeline

• Current leader in next meeting scheduler: Wed., March 9th, 2022 15:30 CEST

Proposal submission window: Mon., April 4th-April 30th, 2022

• Suggested deadline for proposal draft (?): (?) Mon., March 28th, 2022 (?)

OP2.1-OP2.2 Electrostatic core turbulence proposals





Proposal sharing and development tools

MPCDF Datashare – Proposals folder: https://datashare.mpcdf.mpg.de/s/DLSsZfZEU62SuW3

- Can upload / download / edit with url
- Allows using track changes with word documents
- No backup tool or version control -> requires manual backups
- "Google docs" OP2.1 proposals:

https://docs.google.com/document/d/1BxhXvOIpYEJVacZCE8z9zILV_fhgH6FMn-s1q16v9tM/edit?usp=sharing

- In browser / multi-user editing and version control with url
- Template with W7-X proposal requirements included

Other suggestions?

03.03.2022

Agenda – 1st coordination meeting – Proposals





Today:	Proposal title	Presenter
5 mins	Intro + Tools available for gathering proposals + Discussion	Weir
10 mins	Detailed characterization of density fluctuations and E_r in extended operational and diagnostic parameter space	Carralero
	The ITG-TEM Transition and its dependence on collisionality	
10 mins	Search for TEMs in low-mirror/negative-mirror configurations	Alcusón
	Identification of core electron scale instabilities	
	Instability characterization in negative mirror configuration	
	Massive LBO injection for edge profile control (delayed until next meeting)	
10 mins	Turbulent (de)stabilization driven by non-trace impurities	García-Regaña
	Assessment of the relative weight of the different transport channels (i.e. neoclassical and turbulent) on particle transport	
10 mins	NBI modulation experiments (also part of TG Profiles + TG Heating)	Geiger
15 mins	Turbulence limits of NBI core density peaking	Bähner
	Ion-scale turbulence during sustained/repeated pellet fueling	
	Turbulence "matching" between pure ECH and pure NBI heating	
	ITG characterization in low mirror configuration pellet-fueled discharges	

03.03.2022

Tentative Agenda – 2nd coordination meeting – Proposals





TBD:	Proposal title	Presenter
5 mins	Intro + Summary of previous meeting	Weir
10 mins	Particle transport in ECRH plasmas (Steady state profiles and gas puff modulation experiments; also discussed in the TG Profiles)	
	Investigation of the particle Pinch in ECRH plasmas (using ECRH deposition scan)	Fuchert
	Density peaking at very high gas fueling with O2 heating	
5 mins	Search for / characterization of UI	Proll
5 1111115	Testing the stabilization of CTEM with increasing quasi-isodynamicity by varying the plasma beta (moved to EM turbulence)	
15 mins	Electron temperature gradient control with off-axis ECRH power density scans for TEM/ETG studies	
	Matching physics parameters and fluxes to nonlinear gyrokinetic calculations at the ion-scale	Weir
	The ITG-TEM transition and its dependence on collisionality	
	Stability survey of the density gradient driven TEM while holding collisionality	
	Configuration comparison high/low/negative mirror (with matched profiles)	
5 mins	Shear stabilization of ion scale driftwave turbulence	Trimino-Mora
15 mins	Te/Ti scans for core ITG growth rate control with ECRH	
	Te/Ti scans for core ITG growth rate control with ECRH and ICRH	Beurskens
	ITG growth rate control whilst varying the ratio of Te/Ti at constant Qi (ECRH deposition scan)	
5 mins	Turbulence during power step-down induced edge density gradients	Hansen?
5 mins	Massive LBO injection for edge profile control	Alcusón

03.03.2022