



Minutes TJ-II access committee

February 26th 2021

Members present by video-conference: Carlos Silva (IPFN, Lisbon), Monica Spolaore (Conorzio RFX, Padova), Kieran McCarthy (CIEMAT), Teresa Estrada (CIEMAT), Carlos Hidalgo (CIEMAT).

Apologies. Dolores Calzada (Córdoba University)

Carlos Hidalgo welcomed all participants and explained that:

- ✓ The TJ-II call [spring 2021 campaign] has received proposals covering a wide range of relevant research goals that are fully in line with the priorities of the Eurofusion (stellarator) work programme. External proposals are led by collaborators from Europe, Russia, Ukraine, Japan and US.
- ✓ The total number of requested sessions is about 15 sessions [including 3 sessions for IAEA joint experiments].
- ✓ The foreseen number of TJ-II experimental sessions for the spring 2021 campaign [from March to June] is estimated in 30.
- ✓ Due to the on-going COVID-19 pandemic many collaborators plan to join TJ-II experiments remotely while others are willing to join the experiments on site, if feasible.
- ✓ Some proposals, although discussed with proponents, were not fully developed in the wiki / TJ-II and therefore were not included in the present planning [see http://fusionwiki.ciemat.es/wiki/TJ-II:Experimental_proposals].
- ✓ Some proposals would require the installation of diagnostics in the TJ-II facility [e.g. RFA proposed IST / Lisbon] that might not be feasible in the spring 2021 campaign.

Monica Spolaore asked about time period of TJ-II operation during 2020. Carlos Hidalgo explained that TJ-II operation was abruptly ended at the beginning of March 2020 due to COVID-19. Carlos Silva emphasized the importance of TJ-II remote access tools and data access to pursue the programme proposed by external collaborators. Teresa Estrada explained that these tools are available and will be expanded during the 2021 campaign (e.g. including on-line zoom connection to share control room screens, special access accounts for outsiders). Kieran McCarthy explained that IAEA joint experiments must be on-site. Therefore, in case the proposed time slot is not feasible [June 2021], IAEA joint experiments might be located during the 2021 winter campaign. This action will require the formal approval by IAEA.

Proposals were discussed and the research planning approved by the committee. It was agreed to accommodate 14 sessions [see table 1] to external users, including back-up



sessions from the LNF programme [e.g. in case IAEA joint experiments have to be delayed] and to postpone the installation of the RFA diagnostic [IST] to winter 2021 campaign.

External proposal for the TJ-II 2021 spring campaign [March – June]	Principal Investigator	Funding source	Sessions awarded
TJ-II: Influence of magnetic configuration on filament dynamics Collaboration IPP (Germany)	Daniel Carralero (CIEMAT) Gustavo Grenfell (IPP)	Eurofusion WPS1 LNF	3
TJ-II: Fast particles induced transport: ExB transport and asymmetries Collaboration Aix Marseille University (France)	David Zarzoso (Aix Marseille University)	Eurofusion WPS1 LNF	2
TJ-II: Influence of AEs on ExB transport: role of phase shift effects Collaboration Aix Marseille University (France), IPP- Prague (Czech Republic)	Samuel Mazzi (Aix Marseille Univ) Filip Papausek (IPP Prague)	Eurofusion WPS1 LNF	1
TJ-II: Two dimensional distribution of plasma potential and density Kurchatov Institute (Russia) & Kharkov Institute (Ukraine) collaboration	A Melnikov (Kurchatov Institute, Moscow, Russia) and O. Kozachek (Kharkov Institute, Ukraine)	Eurofusion WPS1 LNF	2
TJ-II: Impurity injection with TESPEL in TJ-II stellarator / NIFS (Japan)	N. Tamura (NIFS) K. McCarthy (Ciemat)	Eurofusion WPS1 LNF International funding (NIFS)	1
TJ-II: Biasing experiments in TJ-II: Feed back control of Zonal Flows and cross-phase effects on turbulent transport NIFS and Kyoto University (Japan)	H. Takahashi [NIFS, Japan], Sh. Ohshima [Kyoto University]	Eurofusion WPS1 LNF International funding (NIFS)	2
TJ-II: Physics of transport decoupling, an approach to measure the phase relation between density and temperature fluctuations IST (Portugal) and UWV (US)	Igor Nedzelskiy (IST) Mark Koepke (UWV) It was agreed to postpone this proposal to the TJ-II winter 2021 campaign	Eurofusion WPS1 DOE (US)	0
IAEA joint experiments	Kurchatov Institute, Russia [Melnikov] Ciemat (K. McCarthy)	IAEA	3
		TOTAL	14

Table 1.