



EUROfusion pedestal database: status and plans

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JET



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People involved



- Coordinator: L. Frassinetti
- JET
 - **L. Frassinetti** (KTH): workflow, main scripts for local DB in IDL, pre-ELM data processing, script to transfers DB to IMAS, coordination
 - **P. Bilkova** (IPP.CR), **P. Bohm** (IPP.CR), R. Fridström (KTH) for pre-ELM data processing
 - S. Saarelma (UKAEA), **H. Nyström** (KTH) for PB stability analysis
 - E. Giovanozzi (ENEA), equilibrium
- TCV
 - **B. Labit** (SCP): main scripts in matlab, pre-ELM data processing, PB stability analysis, script to transfers DB to IMAS
- AUG
 - **M. Dunne** (IPP): main scripts in matlab, pre-ELM data processing, PB stability analysis, script to transfers DB to IMAS
- MAST-U
 - **R. Scannell** (UKAEA) main scripts in matlab, pre-ELM data processing, PB stability analysis, script to transfers DB to IMAS
- IMAS
 - **F. Imbeaux, M. Owsiak**

In blue: people active in 2021 in the project via the database activity, via WPJET1 or via WPMST1/WPTE

PRESENT STATUS

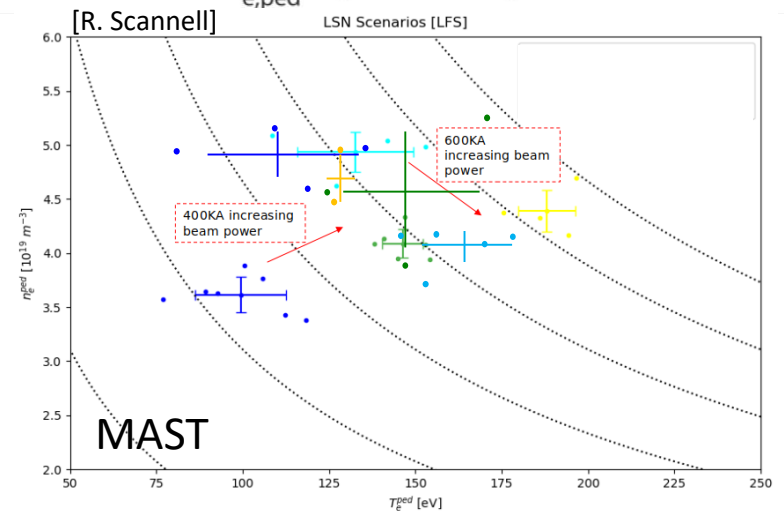
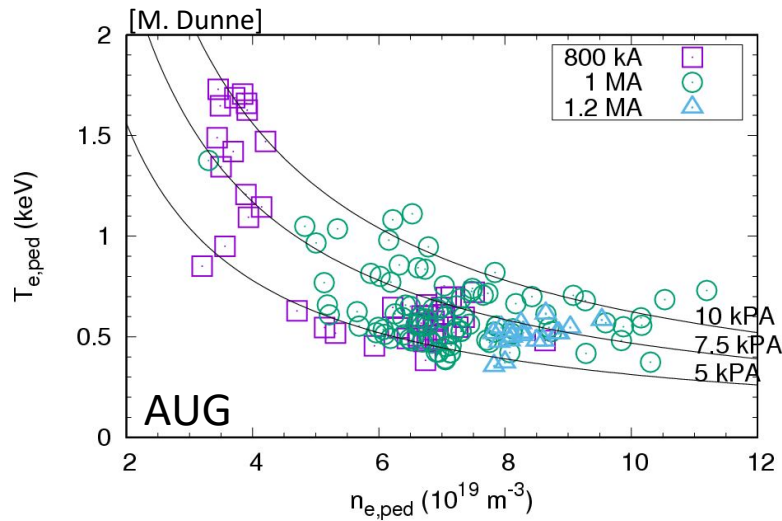
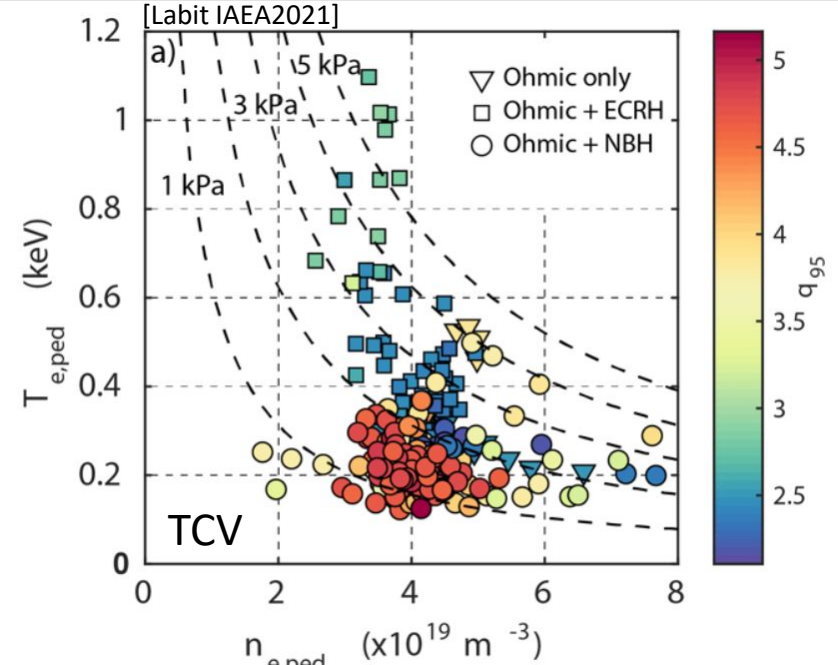
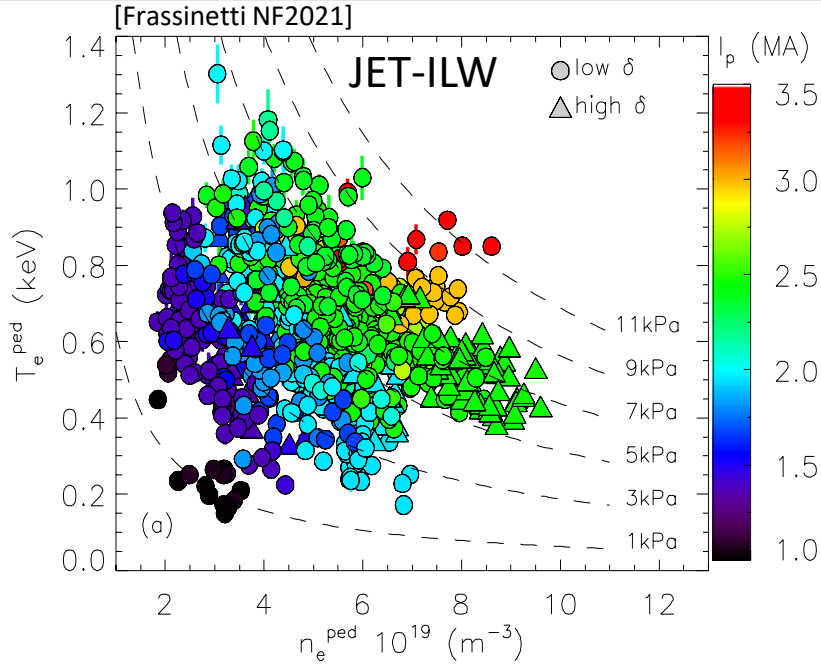


- JET
 - Present local version of the database: **≈3550 entries** (validated and non validated). All H-modes with good TS **data till Dec 2020**.
 - Definitions and key results presented at the ITPA-PEP in several meetings.
 - Script to transfer the data in **IMAS: ready**
 - Validated data **transferred on the the gateway** (june 2021)
- TCV
 - local version of the database (june 2021): **≈750 entries**
 - Scripts to transfer the data in **IMAS: not ready**
- AUG
 - local version of the database (june 2021): **≈150 entries**
 - Scripts to transfer the data in **IMAS: not ready**
- MAST-U
 - local version of the database (june 2021): **≈40 entries**
 - Scripts to transfer the data in **IMAS: ready (but it must be updated)**

Publications:

- L. Frassinetti et al., Nucl. Fusion 61 (2021) 016001
- B. Labit et al., 28th IAEA-FEC, 10-15 May 2021, EX/P4-17
- L. Frassinetti et al., 45th EPS Conference on Plasma Physics 2 - 6 July 2018, P4.1027

EXAMPLES: pedestal height





- JET:
 - extend to the database to TT and DT pedestal and to the new campaigns
 - make the local JET version easily available to JET users

- AUG, TCV, MAST-U:
 - finalize scripts to transfer data to IMAS
 - Extend the databases

- Decide how to treat the DBs of the four machines on the gateway, once all databases have been transferred to IMAS.

- Add profiles data:
 - Information to perform peeling-balloning stability analysis:
 - Separatrix shape, Te and ne profiles (plus Ti, zeff profiles if available)