Ohmic H-Mode



Goal:

- Complete XP-506.
- Comparison between core and edge turbulence/transport, leading up to and immediately following L-H transition. Ohmic H-modes -> good accessibility to core for reflectometers.
- Data set from 2008 half-day missing measurements from key diagnostics:
 - GPI, poloidal correlation reflectometer.
- Post-processing: FDTD2D, TRANSP, gyrokinetic codes.
- Requested time: <0.5 days.
 - 1) Fixed base shot at 4.5 kG, 900 kA, similar to 129700.
 - 2) Vary correlation reflectometer step pattern: Total of 12 shots. Sweep intervals at 2.5, 5, 10 ms for radial scan: 2 x 3 = 6 shots Fix frequency at 29 GHz, 31 GHz, 33 GHz for improved time resolution: 2 x 3 = 6 shots

Additional diagnostics:

CHERS, ERD, MPTS, optical soft XRAY, ORNL reflectometer, FMCW reflectometers, BES and high-k scattering if available.

Relevance:

- ITPA TC-9 (intrinsic rotation) and TC-12 (H-mode transport and confinement at low R/a).
- L-H transition physics.