

(SG2) Transport and Confinement Report



Date: April. 3, 2024

April. 4, 2024 (A. Shimizu)

Time: 10:30 - 14:35

Shot#: #188751 – #188831 (80 shots)

Prior wall conditioning: NO

Divertor pump: OFF

Gas puff: H2

IPD: OFF

NBI#(1, 2, 3, 4, 5)=gas(None, H, H, H, H)=P(4.7, 4.5, 3.9, 0.0, 0.0)MW

ECH(77GHz)=ant(5.5-Uout (or 1.5U), 2-OUR)=P(690, 380)kW

ECH(154GHz)=ant(2-OLL, 2-OUL , 2-OLR)=P(705, 806, 982)kW

ECH(56GHz)=ant(1.5U)=P(-)kW

ICH(3.5U, 3.5L, 4.5U, 4.5L)=P(0.0, 0.0, 0.0, 0.0)MW

Topics

1. Investigation of turbulence and heat propagation characteristics during e-ITB formation transition and back transition (N. Kenmochi)

Investigation of turbulence and heat propagation characteristics during e-ITB formation transition and back transition

(N. Kenmochi)

Experimental conditions:

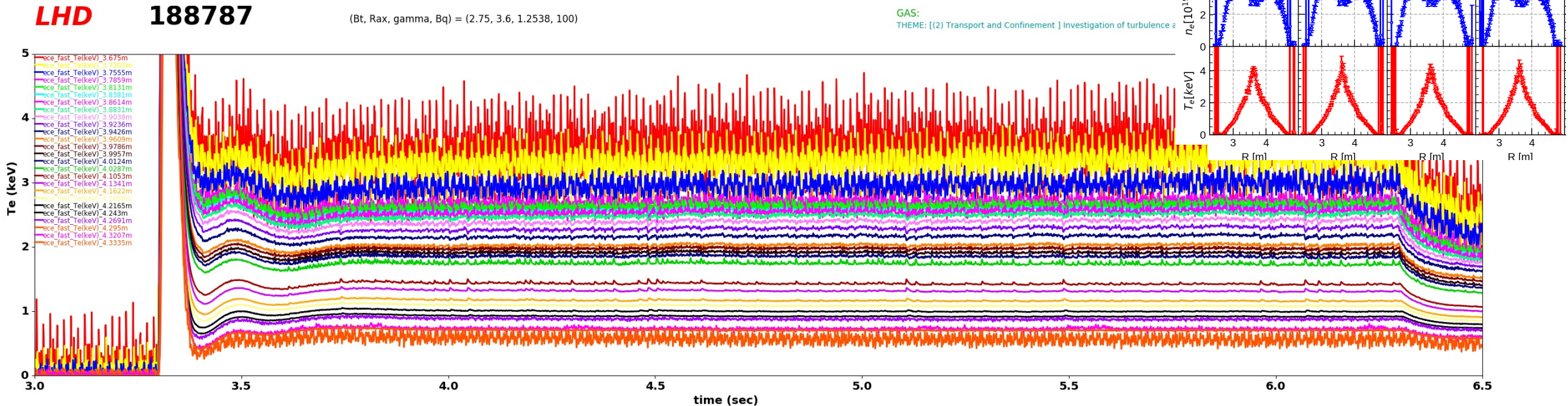
$(R_{ax}, \text{Polarity}, B_t, \gamma, B_q) = (3.6 \text{ m}, \text{CW}, 2.75 \text{ T}, 1.2538, 100.0\%)$ (# 188751 - #188831)

Objective:

To investigate the turbulence and heat propagation characteristics during e-ITB transition and back transition.

Results:

- ✓ Discharges at the threshold density of e-ITB formation have resulted in observed heat propagation associated with intermittent events.
- ✓ Positional scan data of both BS and HIBP measurements have also been successfully taken.
- ✓ Fast Thomson scattering data have also obtained at 20 kHz sampling.
- ✓ The characteristics of heat and turbulence propagation will be investigated.



Investigation of turbulence and heat propagation characteristics during e-ITB formation transition and back transition

(N. Kenmochi)

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