Contribution ID: **26** Type: **not specified**

Experimental characterization of pedestal density fluctuations and correlation with pedestal evolution on JET

Thursday 6 February 2020 09:44 (11 minutes)

Electromagnetic and electrostatic fluctuations with a broad range of frequencies are commonly observed between Edge Localized Modes (ELMs), disruptive events that affect performance in all fusion devices. This work aims to explore the correlations between the pedestal density fluctuations and the pedestal evolution, during the inter-ELM phases of many discharges at JET.
Discharges with variation in parameters such as density and plasma current will be analyzed, allowing the investigation of the correlation between the onset of the fluctuations with the pedestal parameters (electron temperature, density and their gradients).
The evolution of the instabilities and pedestal parameters for the many discharges will be compared to the EPED model (leading model for pedestal structure prediction) to check for consistency.
These studies may contribute to a better understanding of the pedestal evolution.

Author: Mr COSTA, Daniel

Co-author: SILVA, Carlos

Presenter: Mr COSTA, Daniel