Contribution ID: **798** Type: **Poster**

PD/P8-14: ELM Pacing and Trigger Investigations at JET with the New ITER Like Wall

Friday, 12 October 2012 14:00 (4h 45m)

Controlling the ELM frequency is an important task for the development of high performance plasma scenarios. Pellet ELM pacing is one of the most suitable tools to achieve this, due to the local action of the trigger process, which is expected to be effective even in high performance and high plasma current scenarios. Besides allowing ELM pacing investigations under the most ITER relevant conditions, JET also allows further investigations of ELM triggering conditions and their underlying physics to provide a sound basis for predicting the potential ELM mitigation capability in ITER. To exploit this opportunity, a new High Frequency Pellet Injector (HFPI) system is being optimized at JET. Its prime aim is to demonstrate ELM pacing in a large size tokamak under ITER relevant conditions with the goal being to obtain a tenfold increase in ELM frequency. This injector should furthermore shed light on the required ELM trigger conditions and the minimum remaining pellet induced fuelling burden resulting in convective confinement losses.

Country or International Organization of Primary Author

Germany

Primary author: Mr LANG, Peter (Germany)

Presenter: Mr LANG, Peter (Germany)

Session Classification: Poster: P8

Track Classification: PD - Post Deadline