



Contribution ID: 27

Type: **not specified**

## **Fight instabilities with instabilities –a solution for fusion energy**

*Tuesday 28 January 2025 14:54 (12 minutes)*

Tokamak research has long used the H-mode to attempt to achieve the conditions necessary for fusion energy, but it is plagued by Edge Localized modes (ELMs) which disrupt confinement and represent a hazard to plasma facing components. The EDA H-mode is a promising regime which lacks these ELMs, and thus warrants research in its viability of use for large scale machines like ITER and DEMO. The EDA H-mode always has present a localized instability called the Quasi Coherent Mode (QCM), whose properties can be studied as a window into the EDA itself. Of particular interest is the QCM's radial location within the plasma's pedestal, since it is of direct consequence to the extrapolation of the regime to large tokamaks. This work will focus on data from the ASDEX Upgrade tokamak, particularly from the Reflectometry system, to determine a new radial location measurement of the QCM.

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