Tipo di tesi: Magistrale

Corso di Laurea: Ingegneria / Fisica

Tipologia: Sperimentale

Titolo della tesi: Analysis of locked dynamics in MAST-Upgrade / JET / AUG

Proponente/Relatore RFX: Lidia Piron

Relatore Accademico: Lidia Piron

Capogruppo: David Terranova

Responsabile di Programma:

Argomento della tesi: This Thesis aims at investigating the dynamics of locked mode behavior, a Magneto-Hydro-Dynamics instability, in plasmas performed

- I) In the MAST-Upgrade device, at CCFE, Culham, UK, when exploring a wide range of operational parameters, such as plasma current, density, shapes, ..
- II) In the ASDEX Upgrade device, at IPP institute, Garching, Germany, during Shattered Pellet Injector (SPI) experiments,
- III) In the Join European Torus (JET) device, at CCFE, Culham, UK, during Shattered Pellet Injector (SPI) experiments.

Such studies have been performed recently, in 2021/2021, in the framework of JET1/Tokamak exploitation WorkPackage (EUROFusion). The Thesis work consists in analyzing statistically magnetic, kinetic signals, Dalpha and Infra-red camera signals.

The candidate should choose one option (I or II or III), only.

Competenze richieste: Data analysis (Matlab, Python, IDL)

Data della proposta:

Stato: (non assegnata)

Laureando/a: (quando sarà assegnata)