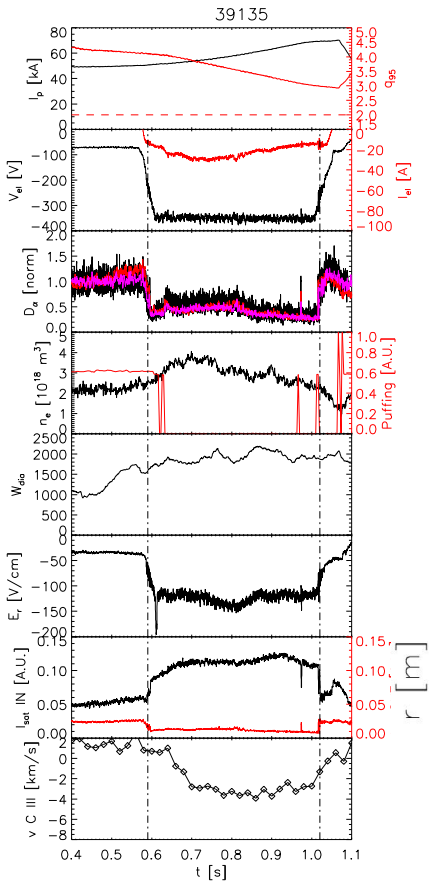
H-mode Achievement and Edge Features in RFX-mod Tokamak Operation

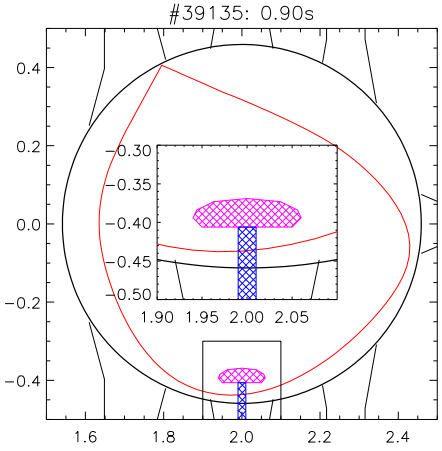
EX/P5-24

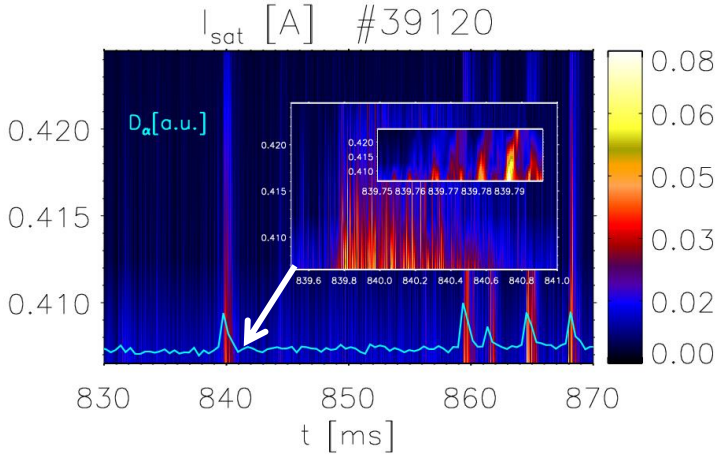
CONSORZIO RFX
Ricerca Formazione Innovazione

Background:

RFX-mod, designed to operate as RFP, allowed operating also as ohmic tokamak. The exploitation of the RFX-mod magnetic boundary active control system is envisaged for ELM mitigation studies.







Experiments:

first investigation of the **edge biasing induced H-mode** in RFX-mod in **circular** and **SN shape**

Results:

- **H-mode** was **achieved** in RFX-mod tokamak both in **circular** and **SN** shape.
- **ELM-like electromagnetic** (EM) filamentary structures are observed. They are characterized by clear **vorticity pattern** and **parallel current.**

Perspectives:

the investigation of interaction between **EM ELM filaments** and applied magnetic perturbations, could exploit the state of art **feedback controlled magnetic boundary** in **RFX-mod** device.