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

**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.