

Abstract Submitted
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Thermal characterization of QSH crashes in RFX-mod ALESSANDRO FASSINA, MARCO GOBBIN, PAOLO FRANZ, LIONELLO MARRELLI, Consorzio RFX, Corso stati uniti 4, 35127 Padova Italy, ALBERTO RUZZON, University of Padova, Physics Dept., RFX TEAM — QSH (Quasi Single Helicity) states have gained a growing interest in RFP research since they show improved confinement and transport features with respect to standard discharges. However, ITBs associated with QSH states can be obtained only in a transient way, and in general with a shorter lifetime with respect to that of the QSH phase [1]. In this work the analysis has essentially the purpose of confirming, with TS data, the Te dynamics seen with the double filter, multichord SXR spectrometer in [1]: TS data allow a better spatial definition of temperature profile and a more reliable description of plasma edge. Te profile features in rising and crashing phases are determined via ensemble averaging, possible precursors of thermal crashes are identified, while $q(r)$ behavior is studied identifying the thermal structures associated with rational surfaces.

[1] Ruzzon et al, 39th EPS Conference, P2.023

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