

Abstract Submitted
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Electron heat transport in RFX-mod A. ALFIER, Università degli Studi di Padova, Dip. Fisica G.Galilei, Padova, Italia and Consorzio RFX, Associazione Euratom-Enea sulla Fusione, Padova, P. NIELSEN, R. PASQUALOTTO, L. MARRELLI, Consorzio RFX, Associazione Euratom-Enea sulla Fusione, Padova, Italia, P. MARTIN, Università degli Studi di Padova, Dip. Fisica G.Galilei, Padova, Italia and Consorzio RFX, Associazione Euratom-Enea sulla Fusione, Padova, A. CANTON, P. INNOCENTE, R. LORENZINI, F. AURIEMMA, Consorzio RFX, Associazione Euratom-Enea sulla Fusione, Padova — Since the beginning of RFX-mod operations, an enhanced time and spatial resolution Thomson scattering diagnostic has been in operation. It measures the Te profile along a diameter in the equatorial plane with 84 spatial positions, with a spatial resolution of 7 mm from $r/a=-.95$ to $r/a=.84$, and a repetition rate of about 25ms, for 10 ND:YLF pulses. We present here a first characterization of Te profiles in low current discharges ($I_p < 700\text{kA}$) and a comparison with lower resolution measurements taken in RFX at similar level of current and density. The on-axis value of the TS diagnostic is in agreement with the double filter Te. Scalings of the on-axis Te with I_p and I/N are presented. Further analysis is shown to compare standard discharge to other regimes such as Rotating Toroidal Field Modulation, Oscillating Poloidal Current Drive, Self Similar Current Decay and Quasi Single Helicity. Temperature and density profiles are used to estimate the confinement time τ_E and beta β .

P Franz
Consorzio RFX, Padova, Italy

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