

X-RAY SPECTRA OF TOKAMAK PLASMA

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A spectrum covering Fe XXV to Fe XXII x ray lines from a tokamak (PLT) plasma has been obtained. Results indicate similarity with the flare spectrum in this region - the forbidden lines also appear in the PLT spectrum.

T_e was about 1.8 keV- a value confirmed by intensity of dielectronic recombination lines. T_i was found to be not more than 0.7 keV, by Doppler width of the He like singlet $1s^2-1s2p \ ^1S_0-^1P_1^0$. A Johansson crystal was used, with the spectrograph adapted for an extended X-ray source.