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ABSTRACT SUBMITTAL FORM

Subject Classification Category _____ [X] Theory [ ] Experiment

Investigation of Mo XVI - Mo XXIX Quasi-Continuum Emission between 65 - 80 Å as a Plasma Diagnostic * K.B. FOURNIER[1], M.J. MAY, S.P. REGAN, M. FINKENTHAL[2], H.W. MOOS, *The Johns Hopkins University;* J.L. TERRY, J.A. GOETZ *MIT Plasma Fusion Center* — Spectra of low and intermediate charge states of molybdenum (Mo XVI to Mo XXIX) have been measured between 65 and 80 Å using a multilayer mirror based polychromator and a grazing incidence spectrometer. The spectral content of the observed 'quasi-continuum' has been analyzed using high resolution spectra from TFR, TEXT and Alcator C-Mod tokamaks and a detailed collisional radiative model of the above charge states. The fractional abundances of each ion have been determined using the MIST transport code with up to date ionization physics. The analysis focuses on the relative concentration of the low charge states (Mo XVI - Mo XXIII) versus the intermediate charge states (Mo XXIV - Mo XXIX). The utility and limitations of the 'quasi-continuum' emission around 75 Å when measured with low resolution spectroscopy as a diagnostic tool are discussed.

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[X] Prefer Poster Session
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A faxed copy is NOT acceptable. This form, or a computer-generated form, plus TWO COPIES, must be received by Friday, February 9, 1996 at the following address:

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