Abstract Submitted
for the DPP17 Meeting of
The American Physical Society

Integrated modeling of temperature and rotation profiles in JET ITER-like wall discharges[1] T. RAFIQ, Lehigh U., USA, A.H. KRITZ, Lehigh U.,USA, HYUN-TAE KIM, Culham Science Centre, UK, E. SCHUSTER, Lehigh U., USA, J. WEILAND, Chalmers U., Sweden — Simulations of 78 JET ITER-like wall D-D discharges and 2 D-T reference discharges are carried out using the TRANSP predictive integrated modeling code. The time evolved temperature and rotation profiles are computed utilizing the Multi-Mode anomalous transport model [T. Rafiq, et *al.*, *Phys. Plasmas* **20**, 032506 (2013)]. The discharges involve a broad range of conditions including scans over gyroradius, collisionality, and values of q_{95}. The D-T reference discharges are selected in anticipation of the D-T experimental campaign planned at JET in 2019. The simulated temperature and rotation profiles are compared with the corresponding experimental profiles in the radial range from the magnetic axis to the $\rho = 0.9$ flux surface. The comparison is quantified by calculating the RMS deviations and Offsets. Overall, good agreement is found between the profiles produced in the simulations and the experimental data. It is planned that the simulations obtained using the Multi-Mode model will be compared with the simulations using the TGLF model [G.M. Staebler, et *al.*, *Phys. Plasmas* **14**, 055909 (2007)].

[1]Research supported in part by the US, DoE, Office of Sciences

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Date submitted: 18 Jul 2017 Electronic form version 1.4