Abstract Submitted
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Testing TGLF in ITER-demonstration plasmas and predictions for ITER[1] ROBERT BUDNY, XINGQIU YUAN, PPPL, GARY STAEBLER, GA — An important goal for ITER and other future Tokamaks is achieving burning plasma conditions. To aid in achieving this goal, predictions of plasma performance are needed to facilitate design of scenarios, heating and current drive systems, and diagnostics. PTRANSP [1] is being used to make integrated, self-consistent, and time-dependant predictions for ITER. Plasma profiles have been predicted using the GLF23 [2] model. An improved model, TGLF [3] has been installed in PTRANSP. This presentation discusses the implementation and testing using ITER-demonstration plasmas such as from JET and DIII-D experiments. Examples include H-mode plasmas at high current. The TGLF simulations are compared with those from GLF23. PTRANSP time-dependant predictions for ITER are given.

[1] R.V. Budny, Nuclear Fusion **52** (2012) 013001.
[2] R. Waltz, *et al.,* Phys. Plasmas **4** (1997) 2482.
[3] J. Kinsey, *et al.,* Nuclear Fusion **51** (2011) 083001.

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