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Status of TRANSP/PTRANSP DOUGLAS MCCUNE, ROB ANDRE, ELIOT FEIBUSH, MARINA GORELENKOVA, CHRISTIANE LUDESCHER-FURTH, XINGQIU YUAN, Princeton Plasma Physics Laboratory
— This poster summarizes the status of TRANSP/PTRANSP code development and run production operations. Production system utilization rates, particularly for MPI jobs, continue to climb. The poster will show production system utilization history and describe status and plans for production facilities and supporting software, as well as the major areas of physics code development. The major physics areas are: simulation using free boundary MHD equilibrium (ISOLVER); neutral beam and fusion product fast ion heating and current drive (NUBEAM); RF heating and current drive (TORIC, GENRAY, and other codes); and predictive transport modeling (PTRANSP and associated modular solvers). In addition, there have been promising advances in capabilities for post-processing and analysis of TRANSP results, based on the SWIM Plasma State software; these too will be described.

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