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Analysis of Pedestal Transport,* J.D. Callen, *UW-Madison;* R.J. Groebner, T.H. Osborne, *GA;* J.M. Canik, L.W. Owen, *ORNL*; A. Pankin, T. Rafig, *Lehigh U.*; T.D. Rognlien, *LLNL*; W.M. Stacey, *Georgia Tech* — To clarify plasma transport properties in the pedestal, we have undertaken an H-mode Edge Pedestal (HEP) Benchmarking Exercise (BE) for a single DIII-D pedestal. Codes used include 1.5D interpretive (ONETWO, WMS), 1.5D predictive (ASTRA) and 2D (SOLPS, UEDGE) codes. The particular DIII-D discharge considered is 98889, which has a typical low density H-mode pedestal. Transport properties are analyzed in near transport equilibrium between Type I ELMs. Both 2D and 1.5D transport properties are obtained and compared. Inferred radial diffusivities are smallest near the midpoint of the pedestal, about 0.1–0.3 m^2/s for electron and ion heat but 10 times smaller for net particle transport. The small effective particle diffusivity could be the result of an inward particle pinch nearly balancing a diffusive outward radial particle flux. These and other pedestal plasma transport properties will be discussed.

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