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Energy Transport Analyses of DIII-D High-β_P EAST-Demonstration Discharge[1] C.K. PAN, ASIPP, G.M. STAEBLER, L.L. LAO, A.M. GAROFALO, GA, X.Z. GONG, Q. REN, G.Q. LI, S.Y. DING, J.P. QIAN, B.N. WAN, G.S. XU, ASIPP, W.M. SOLOMON, PPPL, O. MENEGHINI, S.P. SMITH, GA — Energy transport analyses of DIII-D high-β_P EAST-demonstration discharge have been performed using the TGYRO transport package with TGLF turbulent and NEO neoclassical transport models under the OMFIT integrated modeling framework. Ion energy transport is dominated by neoclassical transport and TGYRO predicted ion temperature profiles agree closely with the experimental measured profiles for these high-β_P discharges. A significant shortfall in the electron energy transport is found for these high-β_P discharges with TGYRO prediction. Increasing the saturated turbulence level for high-wavenumber electron temperature gradient (ETG) driven modes used in TGLF can successfully reproduce the experimental electron temperature profiles. Both the ion and electron energy transport are largely insensitive to reductions in the $E \times B$ flow shear or Shafranov shift stabilization.

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A.M. Garofalo
GA

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