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Electron Thermal Transport in L–mode Edge NCS Plasmas[1] B.W. STALLARD, T.A. CASPER, B.W. RICE, Lawrence Livermore National Laboratory, K.H. BURRELL, C.M. GREENFIELD, J.C. DEBOO, P. GOHIL, C.C. PETTY, D.P. SCHISSEL, G.M. STAEBLER, E.J. STRAIT, General Atomics, C.L. RETTIG, T.L. RHODES, University of California, Los Angeles, G.R. MCKEE, University of Wisconsin, M.E. AUSTIN, University of Texas, L.R. BAYLOR, Oak Ridge National Laboratory — In previously reported DIII–D experiments no clear picture of electron transport behavior in negative central shear (NCS) discharges had emerged. Although evidence is very clear for a core ion transport barrier (TB), for the electrons large T_e gradients were not observed and little or no change in χ_e occurred in many discharges with a strong ion TB. On a few shots some χ_e reduction and modest profile peaking were observed, possibly correlated with larger magnetic shear. A correlation with strong shear has been observed on JT60-U. Recently we have explored the electron thermal transport dependence on shear and q. We have measured plasma fluctuations and explored FIR scattering at large $k_\perp$ ($\sim$20–100 cm^{-1}). The results and their relation to electron transport will be presented.

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