Generalized Diffusion Theory Calculations of the Edge Pedestal Density Profile\textsuperscript{1} J.-P. FLOYD, W.M. STACEY, Georgia Tech — It has been shown [1] that momentum balance requires a pinch-diffusion form of the radial particle flux in the edge plasma. Combined with the particle conservation requirement, this implies that the particle density satisfies a generalized diffusion equation with a convective term. This equation will be solved numerically and compared with the measured density profile in a DIII-D H-mode shot.


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