Abstract Submitted
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Momentum transport calculations on Alcator C-Mod in the L-H mode transition[1] YURI PODPALY, JOHN RICE, Massachusetts Institute of Technology, DAVID MIKKELSEN, Princeton Plasma Physics Laboratory, MATTHEW REINKE, Massachusetts Institute of Technology, KENNETH HILL, MANFRED BITTER, Princeton Plasma Physics Laboratory — Intrinsic rotation and momentum transport during the L-H transition has been the topic of great interest over the last few years as a possible means of controlling plasma instabilities. Alcator C-Mod is uniquely situated to study these transitions at ITER like densities and magnetic fields. During the L-H mode transition, rotation measurements have been made from the core to approximately r/a $\sim$0.7, and the location of the source of momentum in the plasma was found to match the location of the largest pressure gradient difference between the L and the H-mode. Further refinements of that research are presented here with time and space dependent diffusive and convective transport values and analysis comparing total pressure gradient to temperature gradient values. Power balance and gyrokinetic code calculation results on these transitions are shown as well.

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