

Abstract Submitted
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Ohmic ITBs in Alcator C-Mod¹ WILLIAM L. ROWAN, IGOR O. BE-SPAMYATNOV, Fusion Research Center, The University of Texas at Austin, C.L. FIORE, A. DOMINGUEZ, A.E. HUBBARD, A. INCE-CUSHMAN, M.J. GREENWALD, L. LIN, E.S. MARMAR, M. REINKE, J.E. RICE, K. ZHUROVICH, MIT-PSFC — Internal transport barrier (ITB) plasmas can arise spontaneously in Ohmic Alcator C-Mod plasmas. The operational prescription for the ITB include formation of an EDA H-mode in a toroidal magnetic field that is ramping down and a subsequent increase in the toroidal magnetic field. Like ITBs generated with off-axis ICRF heating, these have peaked pressure profiles which can be suppressed by on-axis ICRF heating. Recent work on onset conditions for the ICRF generated ITB (K. Zhurovich, et al., To be published in Nuclear Fusion) demonstrates that the broadening of the ion temperature profile due to off-axis ICRF reduces the ion temperature gradient and suppresses the ITG instability driven particle flux as the primary mechanism for ITB formation. The object of this study is to examine the characteristics of Ohmic ITBs to find whether this model for onset is supported.

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