

Abstract Submitted  
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**Fast Ion Confinement in High Beta, Steady-State Scenario Plasmas**<sup>1</sup> W.W. HEIDBRINK, X. CHEN, University of California Irvine, J.R. FERRON, M.A. VAN ZEELAND, General Atomics, B.A. GRIERSON, Princeton Plasma Physics Laboratory, C.T. HOLCOMB, Lawrence Livermore National Laboratory — Fast-ion confinement is studied for  $q_{min}$  between 1.2-2.8 in plasmas with normalized  $\beta > 2.6$ . Fast-ion D-alpha (FIDA), neutron, and neutral-particle diagnostics measure the confined fast ions. Tearing modes and a “sea” of unstable Alfvén eigenmodes (AE) are observed. In preliminary analysis, the degradation in fast-ion confinement increases with  $q_{min}$ ; increased AE activity appears responsible. Predictions of a model that assumes that AE-induced fast-ion transport is stiff are compared with the data.

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