

Abstract Submitted
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Two-fluid theory of error-field penetration in tokamak plasmas

ANDREW COLE, RICHARD FITZPATRICK, Institute for Fusion Studies, Department of Physics, University of Texas at Austin, Austin, TX 78712 — The theory of error-field penetration in tokamak plasmas is extended to take *two-fluid* physics into account. In particular, diamagnetic, semi-collisional, and Hall effects are all fully incorporated into the analysis. The new theory is used to examine the scaling of the penetration threshold with engineering parameters in ohmic tokamak plasmas.

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