

Abstract Submitted
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Hall Magnetohydrodynamics near a Hyperbolic Magnetic Neutral Line BHIMSEN SHIVAMOGGI, University of Central Florida — Hall magnetohydrodynamics (MHD) properties near a two-dimensional X-type magnetic neutral line in the steady state are considered. Upon viewing the steady state as the asymptotic limit of the corresponding time-dependent problem, Hall effects are shown to be or not to be able to sustain the hyperbolicity of the magnetic field (and hence a more open X-point configuration) near the neutral line depending on the initial conditions.

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