

Abstract Submitted
for the DPP17 Meeting of
The American Physical Society

Electron Pressure Anisotropy in the Terrestrial Reconnection Experiment and the Magnetospheric Multiscale Mission¹ RACHEL MYERS, JAN EGEDAL, JOSEPH OLSON, SAMUEL GREESS, ALEXANDER MILLET-AYALA, MICHAEL CLARK, PAUL NONN, JOHN WALLACE, CARY FOREST, University of Wisconsin-Madison — The NASA Magnetospheric Multiscale (MMS) Mission seeks to measure heating and motion of charged particles from reconnection events in the magnetotail and dayside magnetopause. MMS is paralleled by the Terrestrial Reconnection Experiment (TREX) at the Wisconsin Plasma Astrophysics Laboratory (WiPAL) in its study of collisionless magnetic reconnection. In the regimes seen by TREX and MMS, electron pressure anisotropy should develop, driving large-scale current layer formation [1]. MMS has witnessed anisotropy, but the spatial coverage of the data is too limited to determine how the pressure anisotropy affects jet and current layer creation [2]. Measurements of pressure anisotropy on TREX will be presented, and implications for reconnecting current layer structure in the magnetosphere, as measured by MMS, will be discussed. [1] J. Egedal *et al.*, *Nature Phys.* (2012). [2] J.L. Burch *et al.*, *Space Sci. Rev.* (2016).

¹This research was conducted with support from a UW-Madison University Fellowship as well as the NSF/DOE award DE-SC0013032.

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Date submitted: 14 Jul 2017

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