Abstract Submitted for the DPP15 Meeting of The American Physical Society

MHD Stability and Constraints TOMMASO ANDREUSSI, Alta Space, Pisa, Italy, PHILIP J. MORRISON, The University of Texas at Austin, FRANCESCO PEGORARO, Pisa University — Following up on previous work [1-3] we present examples of MHD equilibria for which we compare/contrast Lagrangian, Eulerian, and Dynamically Accessible stability. These kinds of stability differ by the constraints employed. Such constraints will be discussed, along with explicit examples including simple convective instability and cylindrical configurations with plasma flow.

 T. Andreussi, P.J. Morrison, and F. Pegoraro, *Plasma Phys. Control. Fusion*, 52, 055001 (2010);

[2] T. Andreussi, P.J. Morrison, and F. Pegoraro, *Phys. Plasmas*, **19**, 052102 (2012);

[3] T. Andreussi, P.J. Morrison, and F. Pegoraro, Phys. Plasmas, 20, 092104 (2013)

Francesco Pegoraro Pisa University

Date submitted: 21 Jul 2015

Electronic form version 1.4