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Magnetohydrodynamic Shock Heating of the Solar Corona II MANUEL HUERTA, JOSE ORTA, G. CHRISTOPHER BOYNTON, University of Miami — Our paper in the Astrophysical Journal, vol. 596, pp. 646-655 presented the results of our one dimensional computations using an adiabatic energy equation and an FCT algorithm. Those results showed that strong plane polarized Alfvén waves that propagate along magnetic field lines up into the solar corona can develop into MHD shocks and act as a significant mechanism for coronal heating and wind acceleration in regions of open magnetic field lines. We now present results that allow circular and elliptical polarizations, and we also include gravitational stratification.

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