

Abstract Submitted  
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**A Gyrofluid Model for Space Plasmas** KATE DESPAIN, WILLIAM DORLAND, University of Maryland — We continue our quest for a gyrofluid model that includes effects from  $\delta B_{\parallel}$  at arbitrary  $\rho_i$  scales. Such a model requires that special care be taken with respect to the ion and electron flows. We predict that such a model would capture the relevant physics to explain the behavior of the solar wind power spectra, including the break near the ion Larmor radius. Such a model would serve as a less-computationally expensive tool to explore the role of driving, dissipation, temperature ratio, and  $\beta$  on the overall spectrum.

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