Abstract Submitted
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Effect of Flow Shear and Curvature on Plasma Instabilities[1] J WALLS, A PATEL, O JOHNSON, B FELBER, Bowie State University, MD, S SEN, William Mary, National Institute of Aerospace, VA and Bowie State University, MD, M GOLDSTEIN, NASA-Goddard, University of Maryland Baltimore Country, MD, and University of Colorado, CO — We study the effect of inhomogeneous flow on low-frequency instabilities and turbulence. The inhomogeneous flow includes both flow shear and flow curvature. The effect of flow curvature (second radial derivative of flow) is shown to have significant effect in controlling the turbulence level contrary to the usual prediction that flow shear (first radial derivative of flow) alone controls the turbulence level. The detail result of this simulation will be reported.

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