

Abstract Submitted
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Effect of Inhomogeneous Flow on K-H Turbulence¹ GABRIELA VASQUEZ, Jarrvis Chirstian College, TX, DONG LIN, Virginia Tech, VA, SUDIP SEN, College of William Mary, VA; National Institute of Aerospace, VA; and Bowie State University, MD, WAYNE SCALE, Virginia Tech, VA, NELSON PETULANTE, Bowie State University, MD — We study the effect of inhomogeneous flow on the Kelvin-Helmholz instability 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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