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Stability Study of Rayleigh-Taylor Instability in the Presence of Flow SUDIP SEN — The effect of a radially varying parallel equilibrium flow on the stability of Rayleigh- Taylor (RT) instability is studied analytically in the presence of a sheared magnetic field. It is shown that the parallel flow curvature can completely stabilize the RT mode. The flow curvature also has a robust effect on the radial structure of the mode. Possible implications of these theoretical findings to recent experiments are also discussed.

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