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Influence Of Finite Larmor Radius Effects On Development Of Drift Flute Turbulence With The Presence Of Ion Temperature Gradient ESSAM YASIN, V. SOTNIKOV, J. KINDEL, O.G. ONISHCHNKO, J.N. LEBOEUF — Investigation of flute mode instability in the presence of ion temperature gradient effects will be presented. The approached used in this study allows to analyze spatial scales comparable with the ion Larmor radius. Linear analysis of this system shows that the range of unstable wavelengths in a plasma with large ion charge numbers extends into the region of spatial scales of the order of the ion Larmor radius. Nonlinear stage of the instability was analyzed numerically using the modified FLUTE code. Mixing length estimates of nonlinear saturation levels are in good agreement with simulation results.

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