

## **Impact of nonuniform zonal flow on the resistive-drift eigenmode near adiabatic state**

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The profile of the eigenmode of the resistive-drift plasma with large growth rate is studied with a sinusoidally forced zonal flow  $V$ . A generalized vorticity  $\psi$ , which is the difference between the electron density and the vorticity, is found to be advected by the gradients of the density and the zonal vorticity. The phase difference  $\delta$  between the electric potential and  $\psi$  is positive for the linearly growing mode.  $\delta$  is found to be larger for larger zonal-flow amplitude whereas the growth is larger for smaller zonal-flow. Eigenmode is found to be localized with the width of less than  $10\rho_s$  around the peak of  $V$  in the direction of the electron diamagnetic drift. Eigenmode is almost vanishing where  $V$  is fastest and parallel to the ion-diamagnetic drift. Extension to the turbulence with a spontaneous zonal flow and its implications to the formation of the transport barrier will be presented at the conference.