

Collisionless damping of geodesic acoustic modes with a finite inverse aspect ratio

J. Seol¹, K. C. Shaing²

¹ *National Fusion Research Institute, Daejeon, Republic of Korea*

² *National Cheng Kung University, Tainan, Taiwan*

In this study, the theory of geodesic acoustic modes is extended to the tokamak plasmas with a finite inverse aspect ratio. Using the drift kinetic equation, we investigate the collisionless damping rate of geodesic acoustic mode both analytically and numerically. The damping rate is reduced as the inverse aspect ratio increases.