

Enhanced zonal shears with RMP-induced islands

1. Previous study of RMP effects on turbulence shows that the E_r well becomes shallow near the last closed flux surface (LCFS) due to open field line.
2. RMP experiments On J-TEXT indicate that magnetic islands can enhance low frequency zonal flows, E_r well, and turbulence near LCFS. Thus, RMP-induced island can be as a tool to trigger confinement regime transitions and/or lower the L-H threshold power.

