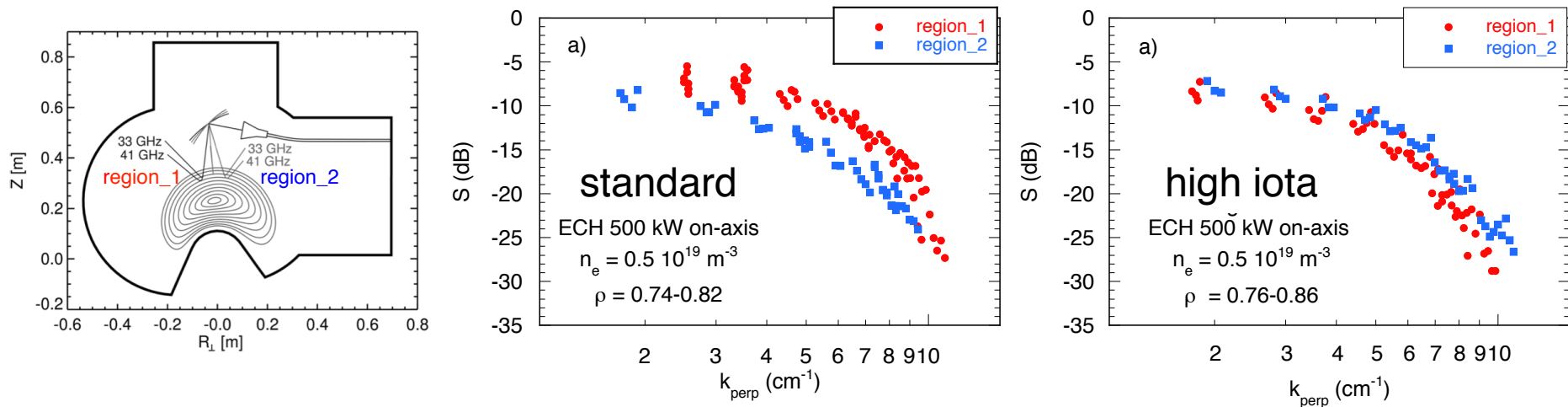
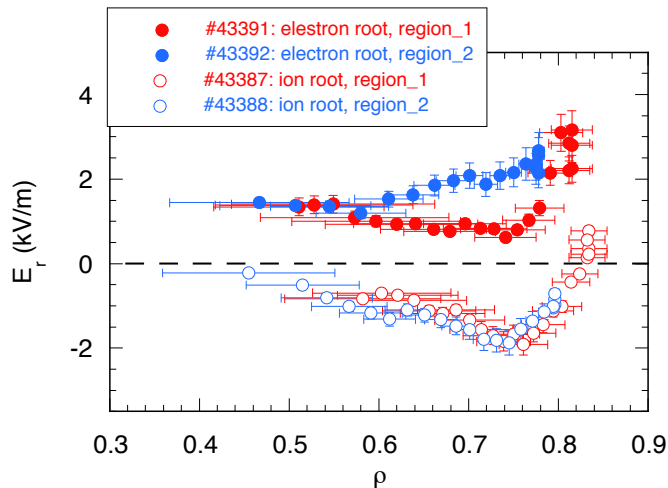




A systematic comparison of k_{\perp} spectrum and E_r measured using Doppler reflectometry at poloidally separated positions in the same flux-surface has been carried out in the stellarator TJ-II



Poloidal asymmetries in the k_{\perp} spectrum are found that depend on plasma density, heating conditions and magnetic configuration. These results are in good qualitative agreement with the spatial localization of instabilities as calculated using the global gyrokinetic code EUTERPE (EX/P1-11)



Differences in E_r are found in low density plasmas (in the neoclassical electron root confinement regime) that could be explained to be due to the radial dependence of electrostatic potential varying over the flux surface (García-Regaña et al. PPCF **60**, 10402 (2018))