

Fishbone modes in plasmas with dual neutral beam injection heating

Hongda He, J. Q. Dong, K. Zhao, H. B. Jiang and Zhixiong He

Summaries

- There exist stable windows around the $q=1$ flux surface for fishbone modes when the DNBI is employed in NBI heating experiment.
- The width of stable windows depends on the position of $q=1$ flux surface and density profile of fast ions. When the moving NBI is inside the stable window regions, the fishbone can not be excited.
- The critical β_h dramatically increases with increasing ratio of DNBI intensities (χ) and the fishbone mode is difficult to be excited for large χ values.
- The real frequency strongly depends on β_h for small χ whereas slightly depends on β_h for large one.