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Rotation effects on peeling-ballooning and infernal modes at Hmode pedestal LINJIN ZHENG, M.T. KOTSCHENREUTHER, P. VALANJU, S. MAHAJAN, University of Texas at Austin, Institute for Fusion Studies — Due to unbalanced ion and electron transports at plasma edge, rotation and rotation shear are always connected to the tokamak pedestal. Since the bootstrap current at pedestal may reduce or even reverse the magnetic shear at plasma edge, and rotation effect can be enhanced by a small magnetic shear, investigation of rotation effects on MHD modes at H-mode pedestal becomes interesting. In this investigation, we use VMEC code to construct tokamak equilibrium (with bootstrap current taken into account) and use AEGIS code to investigate MHD stability. Both peeling-ballooning and infernal modes at H-mode pedestal are studied. The relation of the modes with ELM excitation and edge hormonic oscillation (EHO) will be discussed.

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