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Remote Generation of NTM Precursors by Interchange Turbulence

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Nonlinear 3D simulations are performed. A RMHD model describing the simultaneous evolution of the interchange turbulence and the tearing instability is used. We show that, through nonlinear generation of radially extended modes, turbulence generated at the plasma edge can lead to the formation of seed islands in the vicinity of the $q = 2$ surface. The special role of the zonal flow in that context is explicated.

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