Poloidal Flow Driven by ITG Turbulence in Tokamaks

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Abstract

We show that linear collisionless processes do not damp poloidal flows driven by Ion Temperature Gradient (ITG) turbulence. Since these flows play an important role in saturating the level of the turbulence, this level, as well as the transport caused by ITG modes, may be overestimated by gyrofluid simulations, which imply linear collisionless rotation damping.

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