

Abstract Submitted  
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**Rotation dependence of tearing mode excitation by external perturbation fields on TEXTOR** YUNFENG LIANG, H.R. KOSLOWSKI, K. LÖWENBRÜCK, O. ZIMMERMANN, A. KRÄMER-FLECKEN, R.C. WOLF, U. SAMM, Forschungszentrum Jülich GmbH, Institut für Plasmaphysik, Association EURATOM-FZJ,52428 Jülich, Germany, M. DE BOCK, M. VON HELLERMANN, E. WESTERHOF, FOM-Institute for Plasma Physics Rijnhuizen, Association EURATOM-FOM, PO Box 1207, 3430 BE Nieuwegein, The Netherlands, [www.rijnh.nl](http://www.rijnh.nl), TEXTOR TEAM — The experimental study of the influence of plasma rotation on the 2/1 tearing mode excitation by external perturbation fields on TEXTOR shows that a large plasma rotation in either co- or counter-current direction has a stabilizing effect. However, the dependence of the mode onset threshold on the plasma angular frequency shows an asymmetry, i.e. counter-rotation is always stabilizing whereas co-injection of momentum first lowers the threshold before stabilization sets in. A possible explanation is the influence of the ion polarization current which can be stabilizing and destabilizing, depending on the mode frequency with respect to ion and electron diamagnetic frequencies.

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