

Abstract Submitted
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Flow, magnetic topology and transport in the edge region of RFX-mod device N. VIANELLO, M. SPOLAORE, G. DE MASI, M. AGOSTINI, D. BONFIGLIO, R. CAVAZZANA, R. LORENZINI, E. MARTINES, B. MOMO, P. SCARIN, S. SPAGNOLO, M. ZUIN, Consorzio RFX, Associazione Euratom-ENEA sulla Fusione, Padova, Italy, RFX-MOD TEAM — Sheared flows are recognized to play an important role in regulating turbulent transport since the discovery of improved confinement regimes. Recently the interest in the relationship between flow and magnetic topology received great attention, also motivated by experiment with active MHD control of plasma instabilities through edge stochastization. We present a detailed comparison between edge flow and plasma topology in the edge region of the RFX-mod reversed field pinch experiment. Information on plasma flow is deduced both through insertable probes and a toroidally distributed array of langmuir probes. Different parallel and perpendicular flows are compared with different magnetic topology reconstructed through a Field Line Tracing codes. Hints on the relation between edge magnetic topology and the appearance of strong temperature gradients at the edge is also investigated.

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