

Abstract Submitted
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Radial correlation reflectometry measurements on the JET tokamak A. FONSECA, B. ALPER, R. BUDNY, L. CUPIDO, J. FESSEY, A. FIGUEIREDO, S. HACQUIN, M.E. MANSO, E. MAZZUCATO, L. MENESES, A. SIRINELLI, M. WALSH, JET EFDA CONTRIBUTORS TEAM — Fluctuations and turbulence are believed to play an important role in anomalous transport of heat and particles in magnetic fusion devices. It is of vital importance to characterize transport mechanism in order to understand and control it. In correlation reflectometry (CR), two microwave beams with different frequencies are launched into the plasma from which the turbulence correlation length, L_r , and the density fluctuation level, \tilde{n}/n can be deduced; quantities that are important for the study of plasma turbulence and transport. In this paper, some results of L_r obtained with the four X-mode CR systems installed at Joint European Torus (JET) are reported. Experimentally, it was observed that L_r increases from the plasma edge to the plasma core. Also, L_r decreases inside the Internal Transport Barriers (ITB) [1]. The results obtained at JET agree quite well with the L_r dependence measured in other tokamak machines. [1] - A.C.A. Figueiredo, et.al., *in the 34th EPS Conference on Plasma Physics, Warsaw, Poland, 2-7 July, (2007)*.

R. Budny

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