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Resonant Field Amplification in JET Advanced Regimes¹ MIKHAIL GRYAZNEVICH, UKAEA-EURATOM Fusion Association, Culham, UK, T.C. HENDER, Y. LIU, I.T. CHAPMAN, D. HOWELL, C.D. CHALLIS, UKAEA-EURATOM Fusion Association, E. JOFFRIN, R. KOSLOWSKI, JET-EFDA, Cilham, P. BURATTI, EURATOM-ENEA Fusion Association and JET-EFDA contributors — Resonant Field Amplification (RFA) has been systematically measured on JET, in two domains favourable for ITER steady-state operations: broad q-profiles with qmin 1 and qmin 2. MARS-F code modelling reproduces RFA data at low and high beta and suggests a new method of how the RFA data should be used to determine the no-wall limit experimentally. Although there is no strong evidence of a beta-limit connected with the RWM even at betaN 4 and performance was limited by internal n=1 modes, the observed (using RFA data) decrease in the no-wall limit with the increase in qmin is in agreement with the same dependence of the experimentally achieved highest beta values.

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