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Plasma Rotation in JET Discharges with Low Momentum Input M.F.F. NAVE, CFN IST, Portugal, L.-G. ERIKSSON, CEA, France, T. HELLSTEN, J. BRZOZOWSKI, VR KTH Stockholm, Sweden, B. ALPER, R. BARNESLEY, C. GIROUD, K.-D. ZASTROW, UKAEA, UK, JET-EFDA CONTRIBUTORS TEAM — Studies of plasma rotation in ohmic and ICRF heating were recently performed at JET. Hollow rotation profiles with the core either co or counter rotating had been previously observed with ICRF heating. In the new experiments the conditions for counter-rotation were investigated in L-mode plasmas ($P_{ICRF}=3-6\text{MW}$, $B_T=2-2.75\text{T}$, $I_p=1.2-2.6\text{MA}$). NBI bleeps were used for rotation measurements with charge exchange recombination (CER) spectroscopy. In the absence of NBI, MHD mode analysis is used as a rotation diagnostic in the plasma core. Plasma acceleration with ICRF power is seen from sawtooth precursor frequencies as well as from CER measurements. The effect of different plasma currents (I_p) and ICRF heating details (antenna phasing, H minority concentration and cyclotron resonance position) were considered. Clear profile differences were observed with plasma current. With off-axis ICRF heating, peaked co-rotating profiles were observed at high I_p , while hollow counter-rotating profiles were obtained at low I_p .

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