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Disruption Mitigation with ECRH on FTU tokamak G. GRANUCCI, S. NOWAK, J. BERRINO, F. GANDINI, Associazione Euratom-CNR sulla Fusione, IFP-CNR, Milano, Italy, B. ESPOSITO, P. SMEULDERS, L. GABELLIERI, M. LEIGHEB, D. MAROCCO, C. MAZZOTTA, O. TUDISCO, Associazione Euratom-ENEA sulla Fusione, CR Frascati, Roma, Italy, J.R. MARTIN-SOLIS, Universidad Carlos III de Madrid, Madrid, Spain — Experiments have been carried out in FTU to study the direct influence of ECRH on disruption evolution. Controlled disruptions have done by injection of impurities (Mo) or by increasing the electron density above the Greenwald limit with gas puffing. At the energy quench ECRH (140GHz, 1.1MW) is switched on, using loop voltage as trigger. ECRH is found to be effective in disruption avoidance when power deposition is outside the q=2 in the impurity injection case. The softening of the current decay is also obtained in off-axis deposition, while no effects are observed in case of central heating. Application of central ECRH leads to the suppression of an internal (3,2) mode (which naturally leads to disruption), while the still present external (2,1) is smaller and stable. A dependency is found between the location of the main MHD activity and the power deposition radius, depending on the type of disruption.

Gustavo Granucci
IFP-CNR-Milano

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