

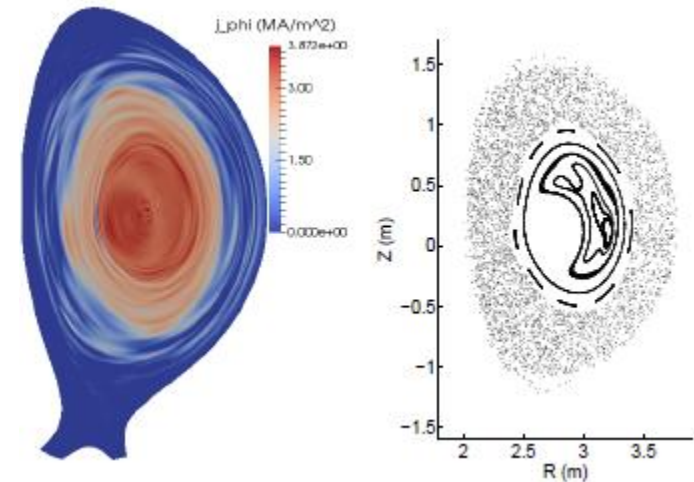
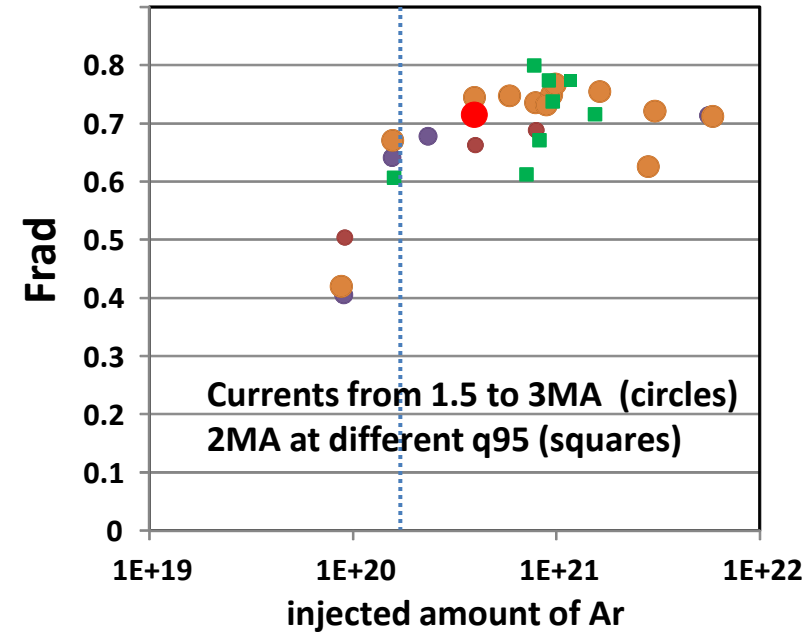
Disruption study advances in the JET metallic wall



JET-ILW disruption mitigation system mimics the ITER set-up with 3 valves in 3 different toroidal locations.

The radiation fraction at current quench does not depend on plasma current nor safety factor when varying the amount of radiative gas (Ar) in the DMV. More than $1\text{-}2 \cdot 10^{20}$ of Ar is needed for an effective disruption mitigation.

Thermal quench simulation with JOEUK: the MGI causes the formation of a 2/1 island and the growth of several magnetic island chains that leads to a formation of a partial stochastization of the plasma and fast loss of the plasma thermal energy.



E. Nardon: to appear in PPCF 2016