



Comparison of Runaway Electron Generation Parameters in Small, Medium-sized and Large Tokamaks – A Survey of Experiments in COMPASS, TCV, ASDEX-Upgrade and JET

(summary slide by V.V. Plyusnin et al. EX/P6-33)



- ❖ Experiments on disruption generated runaway electrons have been carried out in small, medium-sized and large tokamaks – COMPASS, TCV, ASDEX-Upgrade and JET. Small and medium sized tokamaks revealed wide range of possibilities for efficient study of disruptions and runaway electrons in support of JET studies for ITER
- ❖ New data on RE generation in low-density discharges and during disruptions enabled advances in understanding of physics of RE generation. Low frequencies of close distance collisions and low critical runaway energies have been found as constraining parameters for the RE avalanching.
- ❖ RE secondary avalanching was identified and evaluated for the first time in TCV in RE generating discharges after Ne injection. Secondary runaway avalanching resulted in conditions for kinetic instability driven by RE in runaway dominating discharges in TCV.