

# Study of Runaway Electrons in GOLEM Tokamak

Pravesh Dhyani<sup>1</sup>, Vojtěch Svoboda<sup>1</sup>, Jan Mlynář<sup>1,2</sup>, Jaroslav Čeřovský<sup>1,2</sup>, Ondřej Ficker<sup>2</sup>,  
Vladimír Linhart<sup>2</sup>, Jan Stáček<sup>1,2</sup>

<sup>1</sup>Department of Physics, Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University, Prague, Czech Republic

<sup>2</sup>Institute of Plasma Physics, Czech Academy of Sciences, Prague, Czech Republic

High loop voltages and low-density discharges at GOLEM tokamak present favorable conditions for the study of runaway electrons. In this paper, we discuss the interplay between magnetic hydrodynamic (MHD) fluctuations and runaway electrons. In quasi-periodic events, it was observed that tearing modes strongly destabilize during large HXR signals due to the runaways. Tearing modes become stable, when HXRs are suppressed. Causality of events is still not clear, since during the HXRs generation, toroidal electric field also increases, as indicated by loop voltage signal. A detailed analysis will be presented during the conference to understand the problem.