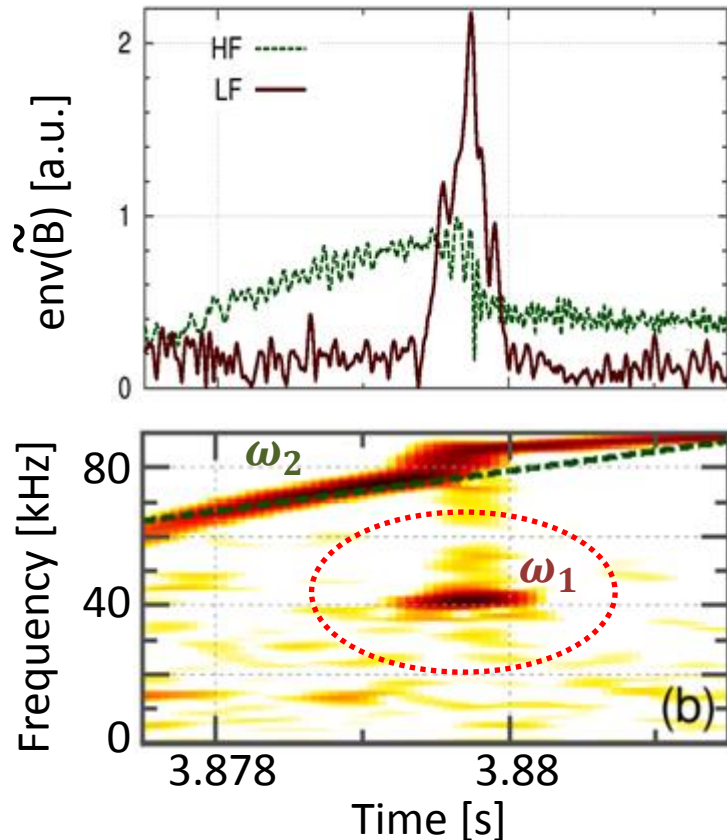


# Nonlinear excitation of subcritical fast ion-driven modes

M. Lesur, et al., TH/P4-18

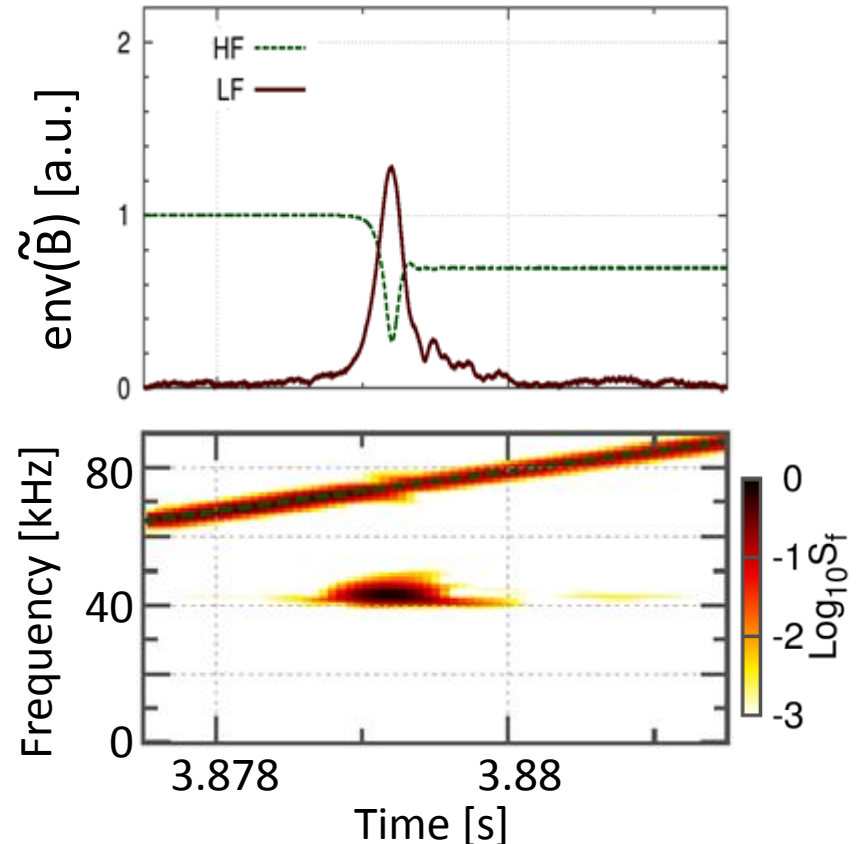
## Experiment (LHD)

Ido, et al., PRL '16



## Simulation (1D model)

Lesur, et al., PRL '16



**A new mechanism of subcritical instability (which couples kinetic nonlinearity in phase-space and fluid nonlinearity in real space) is responsible for the largest, most abrupt EGAM burst in the LHD.**