

Alfvén Eigenmodes Stability and α -particle Confinement

Fusion products drive global wavefields that are Landau damped by the electrons; computations are compared with measurements from the Joint European Torus.

Experiments (Fasoli PL'00) measure dependencies on

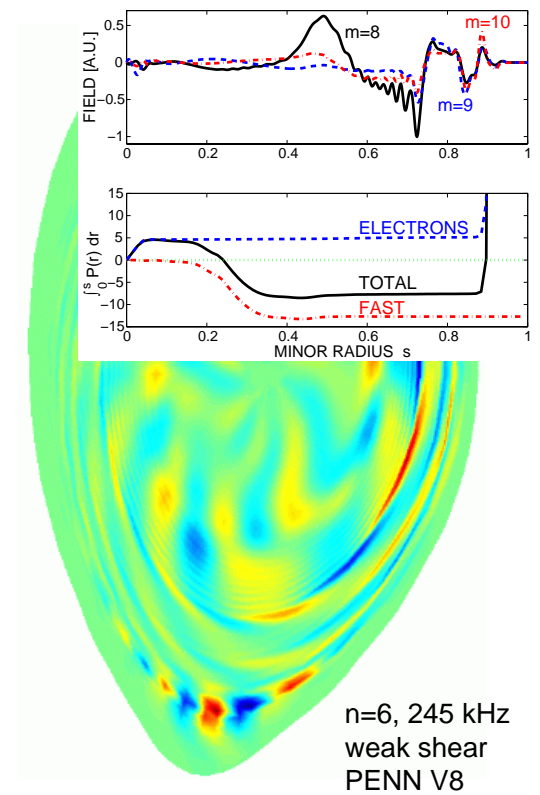
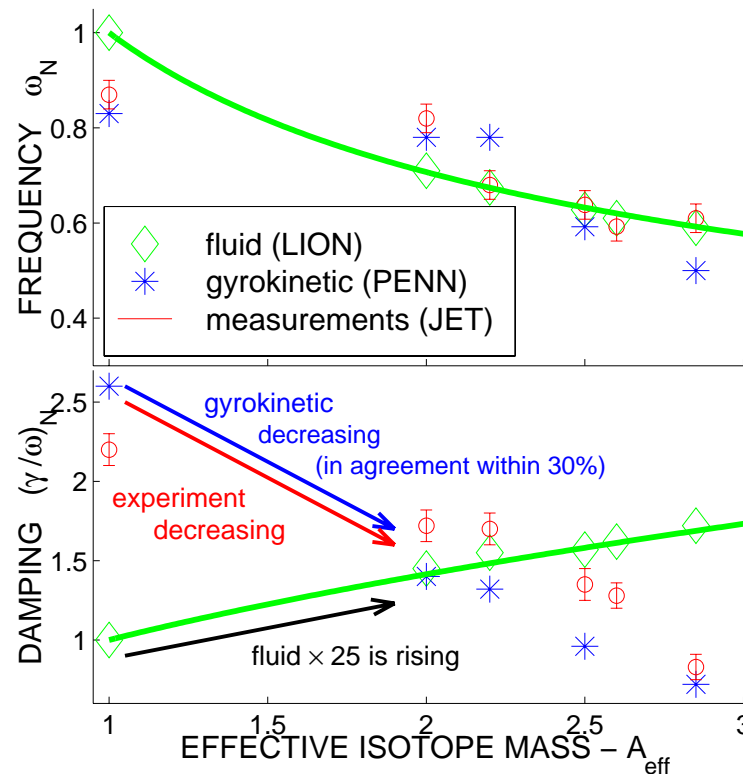
- the isotope mass (figure)
- plasma pressure, shape
- magnetic shear, etc

Computations (Jaun NF'00) test different models and

- show the importance of the shape (figure)

This perfects the predictive capability required for ITER

- identify stable burning plasma scenarios



n=6, 245 kHz
weak shear
PENN V8

EFDA collaboration between the RIT/Stockholm, CRPP/Lausanne, MIT/Cambridge.