

# Status of FIDA systems

- Hardware upgrades completed
  - No major changes in number of channels, temporal resolution, etc.
  - Improved remote control of diagnostics' setup
- Spatial & photometric calibration will start on Thursday 12/4
- Analysis software under development
  - Add information from “red-shifted” side of FIDA spectrum to analysis ?
  - 2009 Run: provide “preliminary quality” results accessible from MDSplus for each shot
- **Both systems up & running for beginning of next Run**

# 2009 Run - proposal

- Continue TAEs & TAE avalanches study
- Focus on “trigger condition(s)” for avalanches, including dynamics of TAEs just before avalanche
  - **Establish TAE avalanche scenario in deuterium**
  - **Modify mode dynamics:**
    - $T_e$  scan (through HHFW) -> damping
    - NB source waveform -> fast-ion profile, drive (?)
    - Density scan -> damping
    - Toroidal field scan -> fast-ion confinement, drive