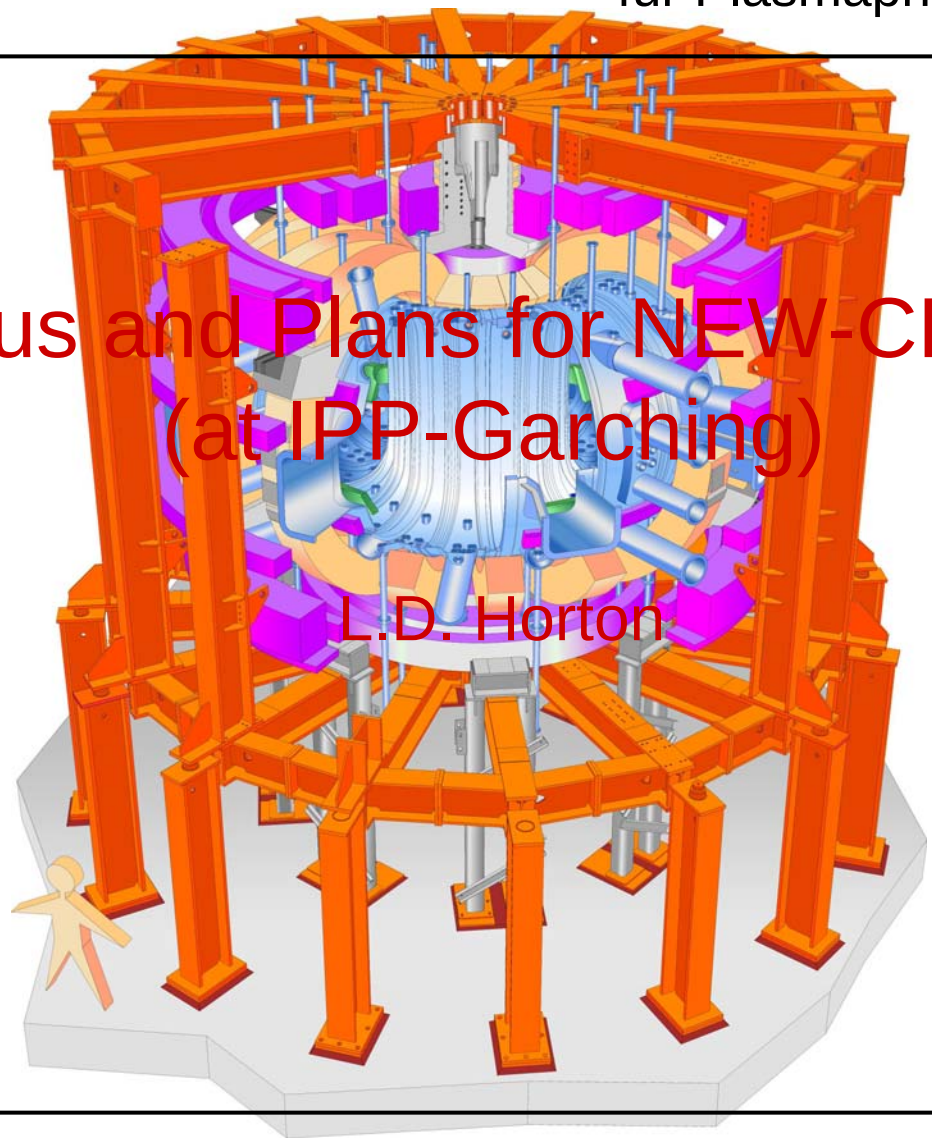
ASDEX Upgrade

Max-Planck-Institut
für Plasmaphysik

IPP



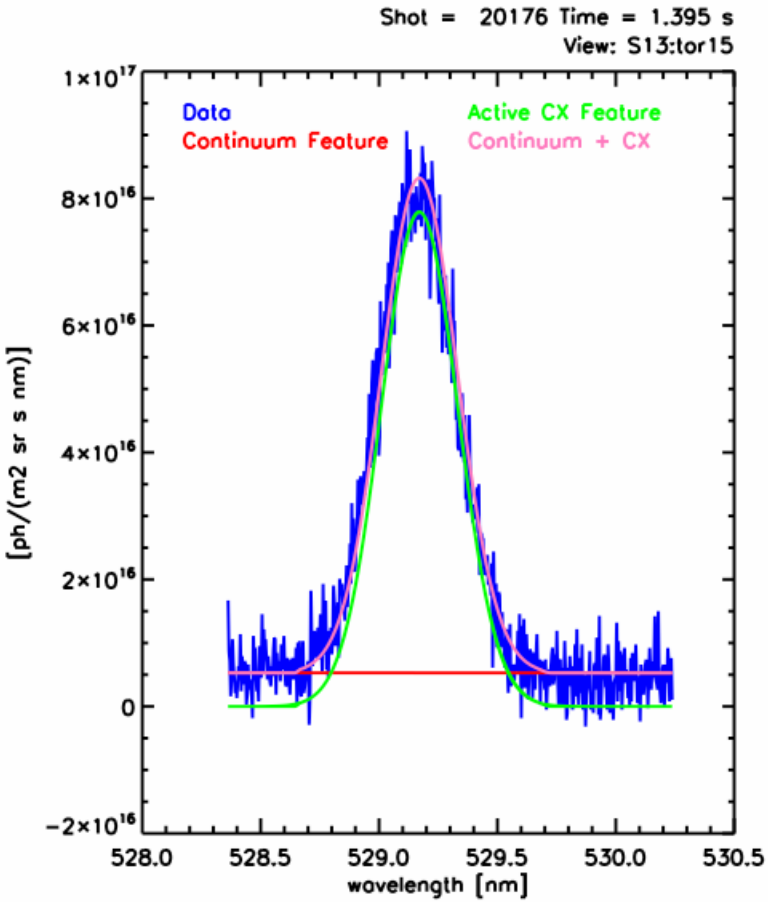
Status and Plans for NEW-CHEAP (at IPP-Garching)

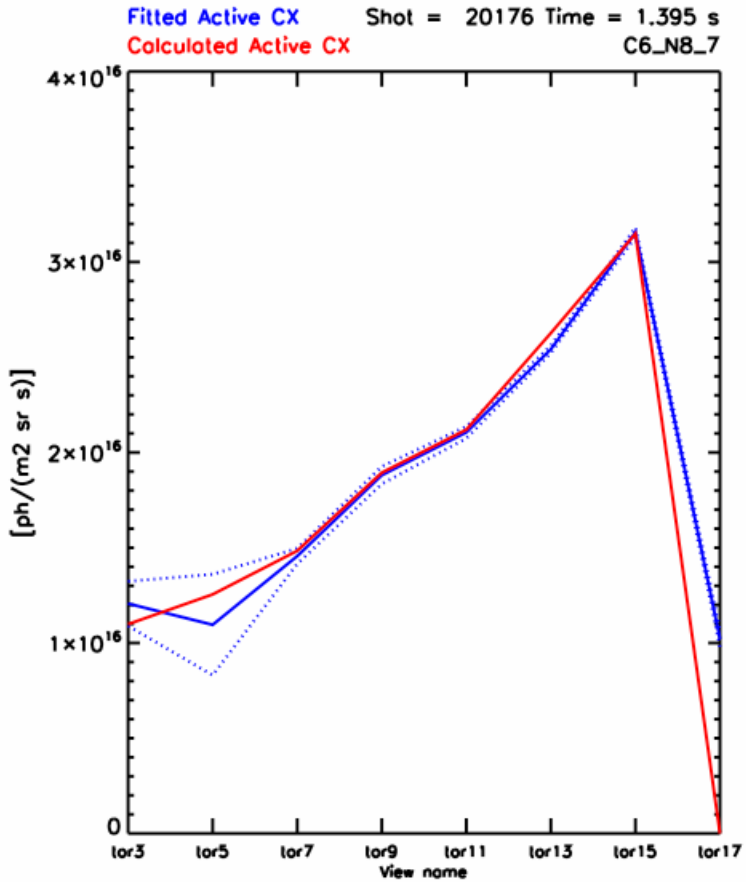
L.D. Horton

Status

- We have written an alpha-version of CHEAP (or, more precisely, a code to deduce ion impurity densities from CXRS spectra & fits), based on IDL
- Advantages:
  - Clear separation of machine-independent modules
  - Forward spectral modelling allowing, in principle, full feature modelling & error propagation via MC techniques
- Disadvantages:
    - Very slow (reason unknown)
    - Only very primitive feedback algorithms

Status


Shot = 20176 Time = 1.395 s
View: S13:tor15
Data
Continuum Feature
Active CX Feature
Continuum + CX
[ph/(m2 sr s nm)]
wavelength [nm]


Fitted Active CX
Calculated Active CX
Shot = 20176 Time = 1.395 s
C6_N8_7
[ph/(m2 sr s)]
View name

Plans

- At the moment, very little is being done due to lack of manpower
  - Upgrades to follow AUG CXRS hardware development (e.g. new edge CXRS system)
  - Comparison of diverging cone model to detailed MC model of beam geometry
  - Inclusion of beam emission features (for calibration)
  - Expansion for Ar CXRS experiment
- Offers of collaboration are welcome