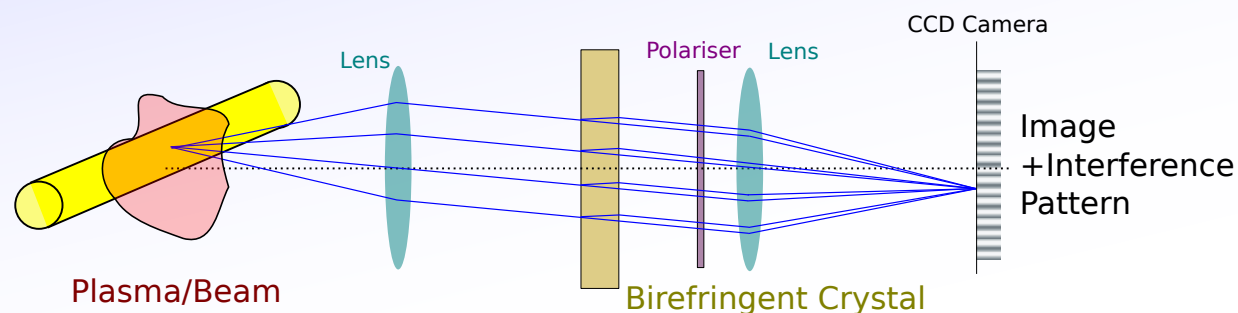


Imaging Motional Stark Effect Development

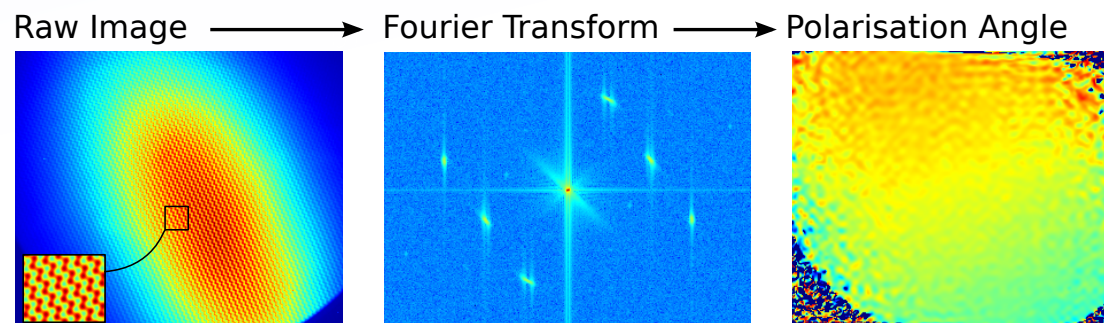
2012 (IPP Greifswald):

Investigation of coherence Imaging diagnostics and development of IMSE system for ASDEX Upgrade.



Jan 2013: (Greifswald/Garching)

Prototype IMSE system installed on ASDEX Upgrade.



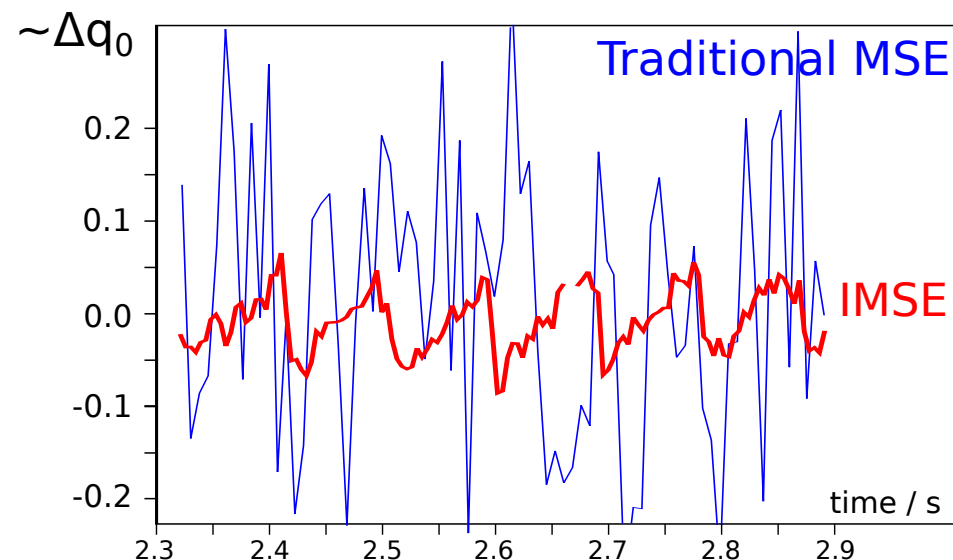
May 2014:

First measurements of sawteeth dynamics with prototype system.

~ 10x sensitivity improvement over traditional MSE.

July 2015+ :

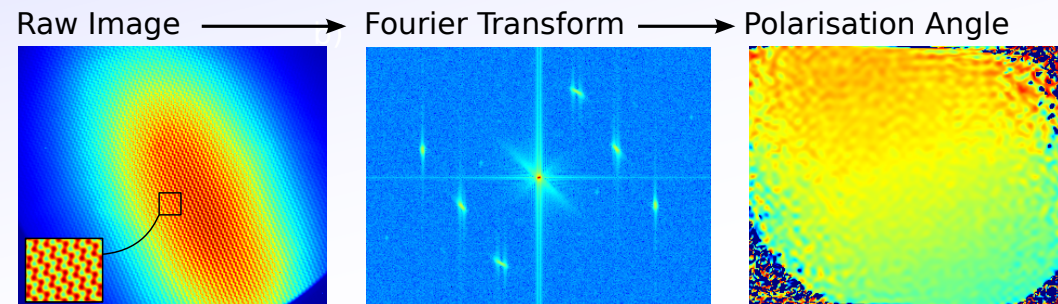
Installation of permanent system, working towards routine calibrated q-profiles.
(See later talk)



Imaging Motional Stark Effect Development (2)

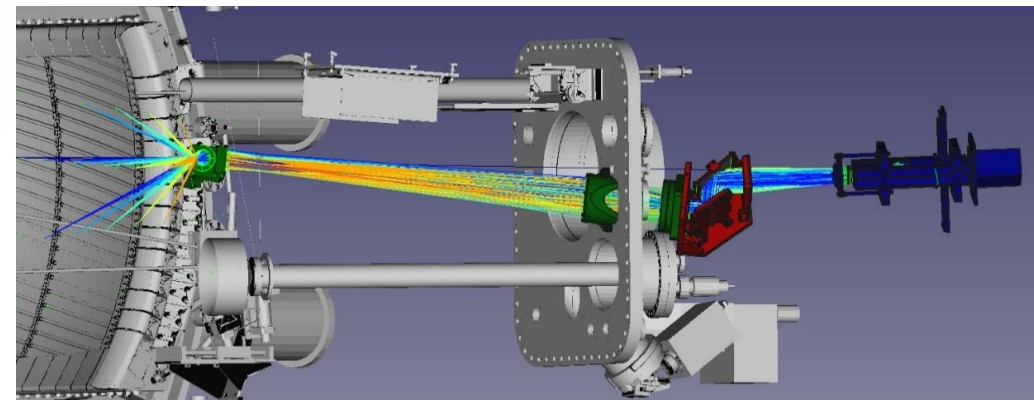
2012-2014: Greifswald/Garching

Development of IMSE prototype diagnostic at IPP Greifswald.



Sept 2014: Permanent IMSE project (MST2)

Design of complex new IMSE optics using Greifswald developed ray-tracing software.



July 2015:

Successful installation and commissioning of new IMSE system.
Routine data collection since then.

April 2016:

- First physics program based on IMSE:
Measure q-profile changes during sawteeth.
- Development of new calibration methods.
- Expect to deliver routine calibrated q-profiles for the next AUG campaign.

