

# Comparison of ELM signatures between ASDEX-U and NSTX

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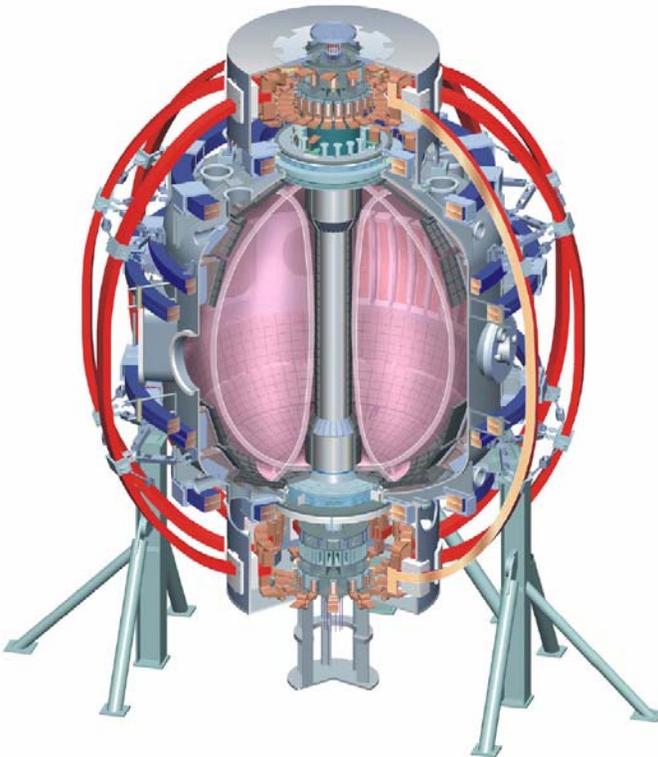
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# Some background....

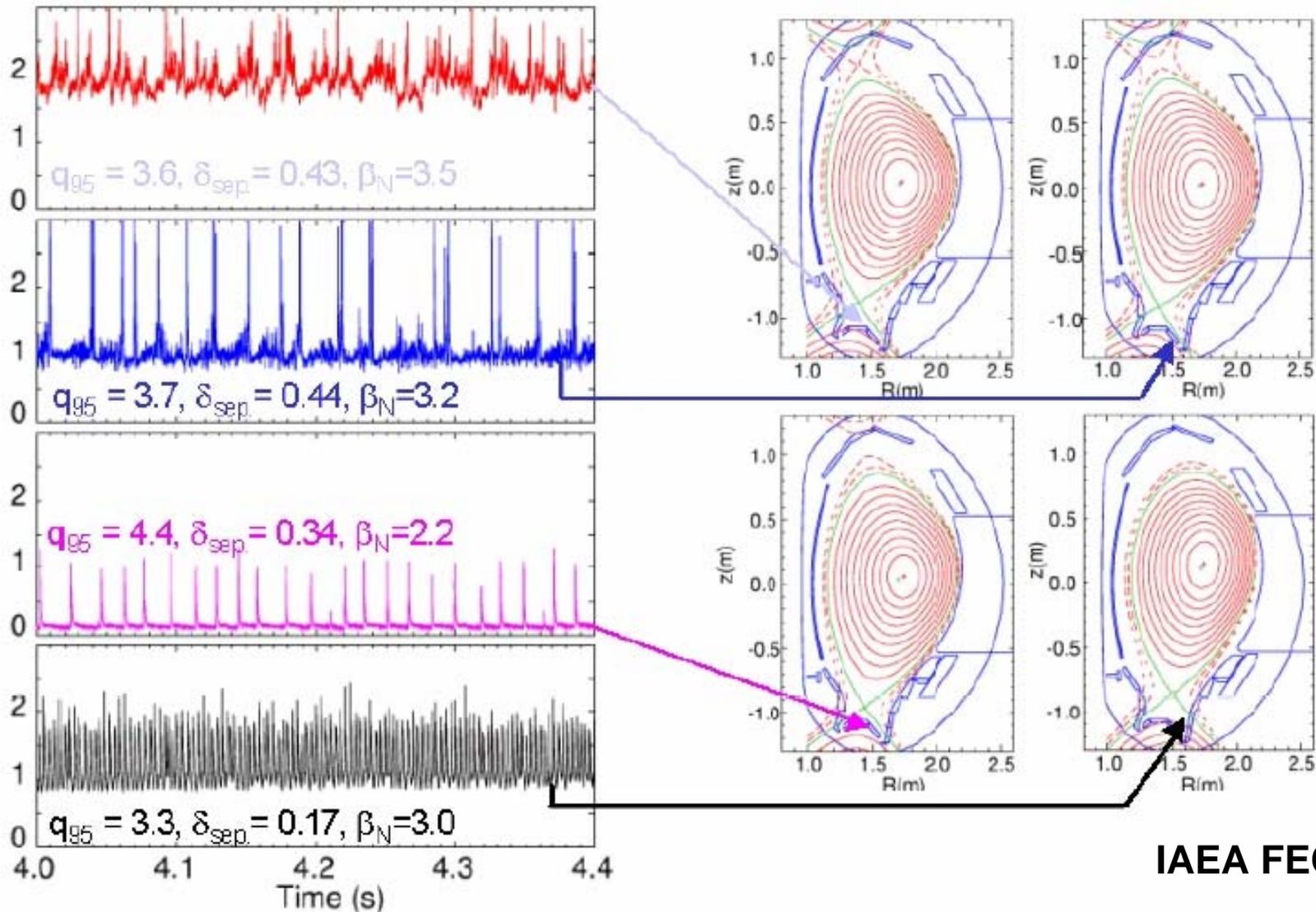
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- Philipp Ridha is a Master's thesis student at Univ. of Munich working w/ Hartmut Zohm at IPP
- He will spend 1 year on NSTX comparing ELM characteristics (magnetic precursors, SXR, etc.) between ASDEX-U and NSTX
- Much of this work will be analysis of existing data on NSTX, and comparing to ASDEX-U results.
- But.... some dedicated time for matching shape and doing a small set of dedicated scans (in density for instance) is desirable.

# ASDEX ELM type sensitive to $\delta R_{SEP}$ , $\delta$ , and $n$

- Transition from Type I to II as  $n \rightarrow n_{GW}$ , nearly DND



# Shot Plan (1 run day)



- Reproduce ASDEX-U shape used in ELM studies as best as possible using rt-EFIT
- Scan magnetic balance from balanced to -1 to -2cm  $\delta R_{SEP}$
- Scan average triangularity from 0.3 to 0.45
- Scan density  $n \rightarrow 0.5-0.9 n_{GW}$
- Document changes in ELM type, compare to ASDEX-U ELM signatures