Summary / Recommendations

Session III: 'OVERVIEW'

Alan Sykes

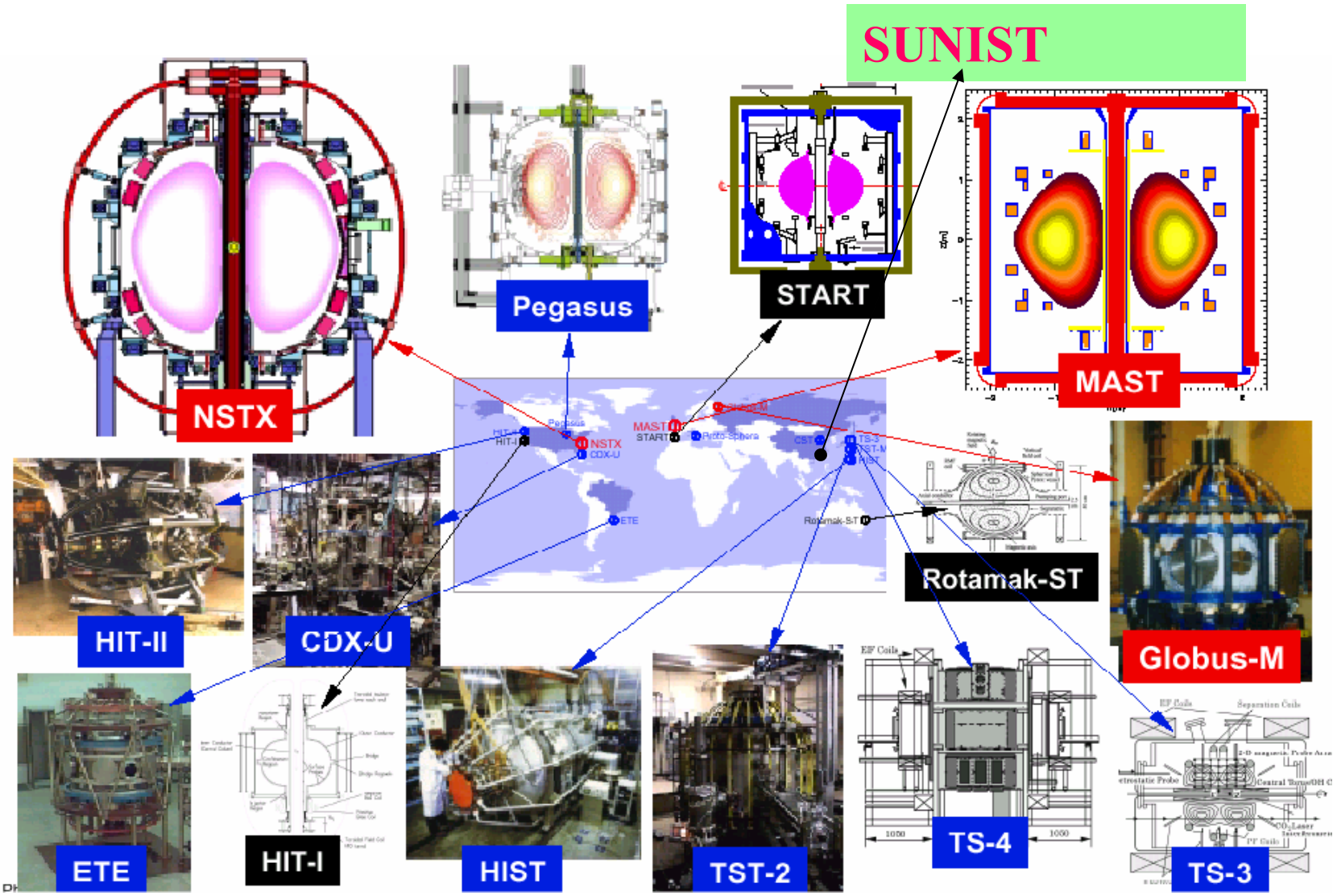
Gryaznevich: Overview of MAST results

Bell: Overview of NSTX results

(Gusev: Overview of GLOBUS results)

Katsurai: Overview of TS-3,4

A sphere full of Spherical Tokamaks



Globus-M, ETE, PEGASUS, TST-2, SUNIST…

can make important contributions e.g RF schemes etc

- but await improvements to power supplies, control systems, etc

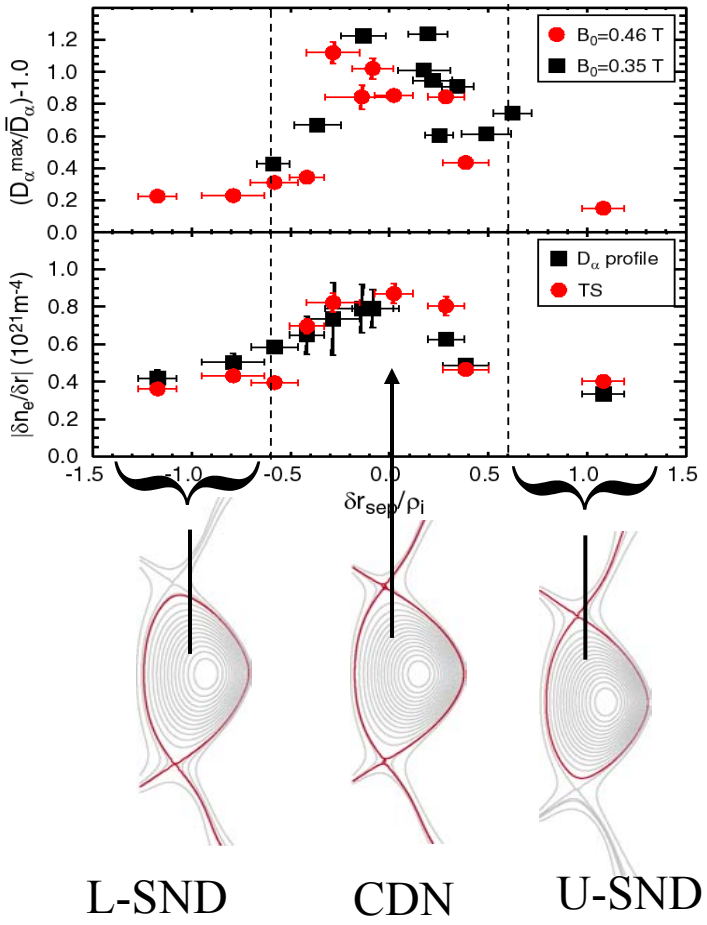
TS-3/4 :

methods of plasma formation, ST merging etc are of scientific interest and could be key to plasma initiation without central solenoid

Ideas for NSTX, MAST (1)

L-H transition:

- can NSTX check CDND access (includes **Ohmic** H-Mode) found on MAST?
- can MAST check SND access found on NSTX?



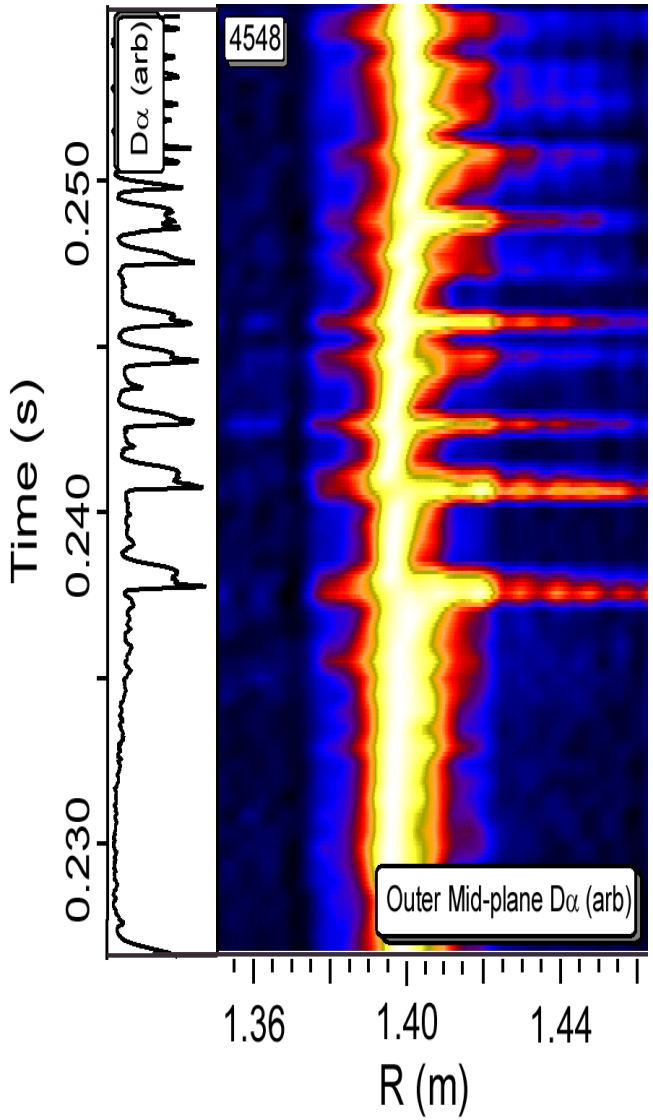
Ideas for NSTX, MAST (2)

ELMS, divertor loading:

•Does NSTX have same divertor loading in DND as MAST?

•Does MAST have Type 1 and giant ELMS as NSTX? Were these in SND?

•Does NSTX see ballistic ELM on outboard midplane?



Ideas for NSTX, MAST (3)

Is onset of q = 1 worse on NSTX than on MAST?

Compare:

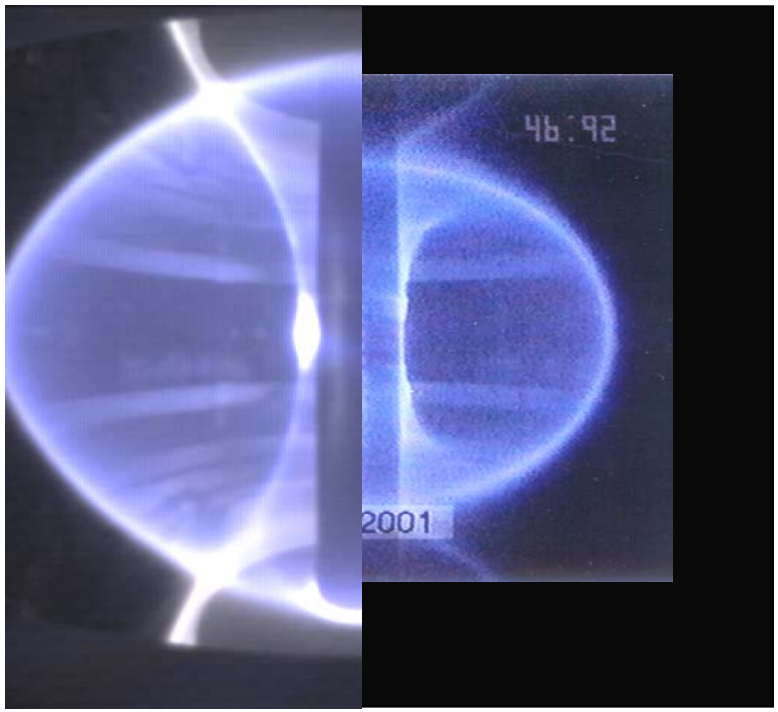
Xe (anomalously high) and Xi (anomalously low)

near/far wall on NSTX/MAST

Vessel conditioning, Pellet Injection, EBW, …

Startup scenarios

Diagnostics (CIF MSE, etc)



Study ‘natural divertor’ on MAST and NSTX !