

The ITER H-mode Confinement Data Base Activity 1989 - 1998

by

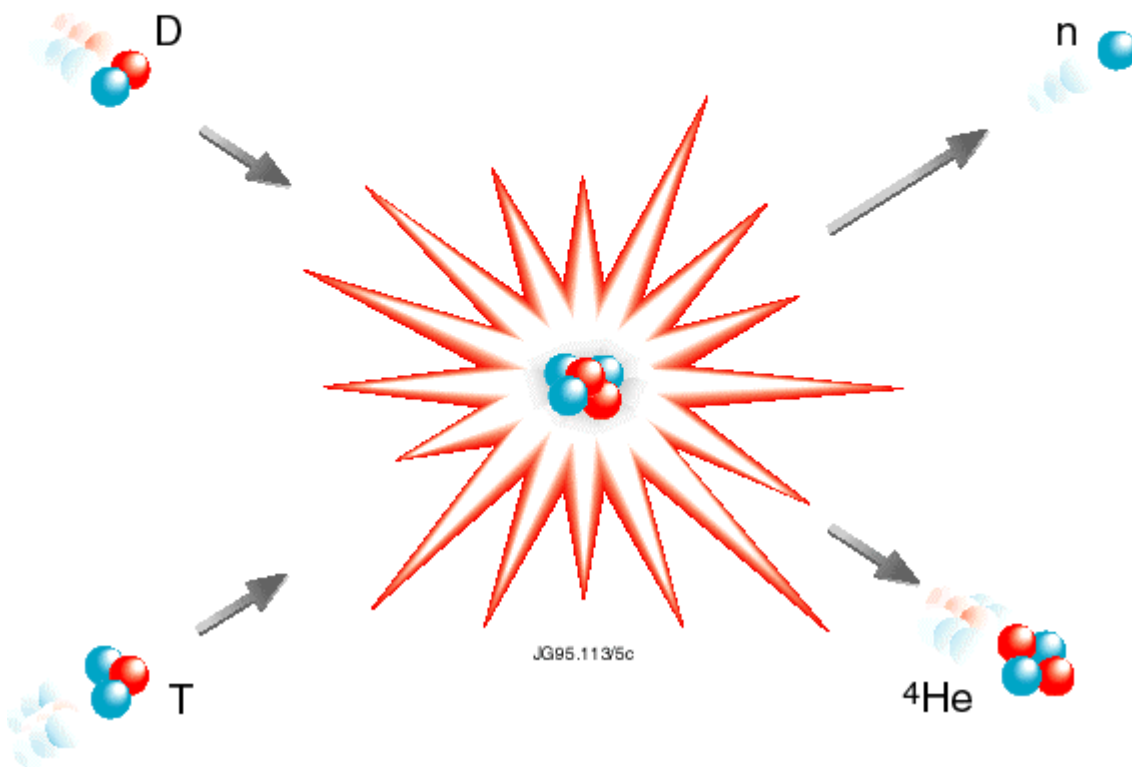
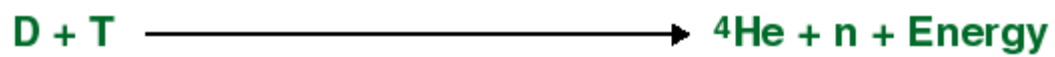
K. Thomsen &
The H-mode Data Base Working Group^{*)}
JET Joint Undertaking, Abingdon, OXON, U. K.

Outline of Talk

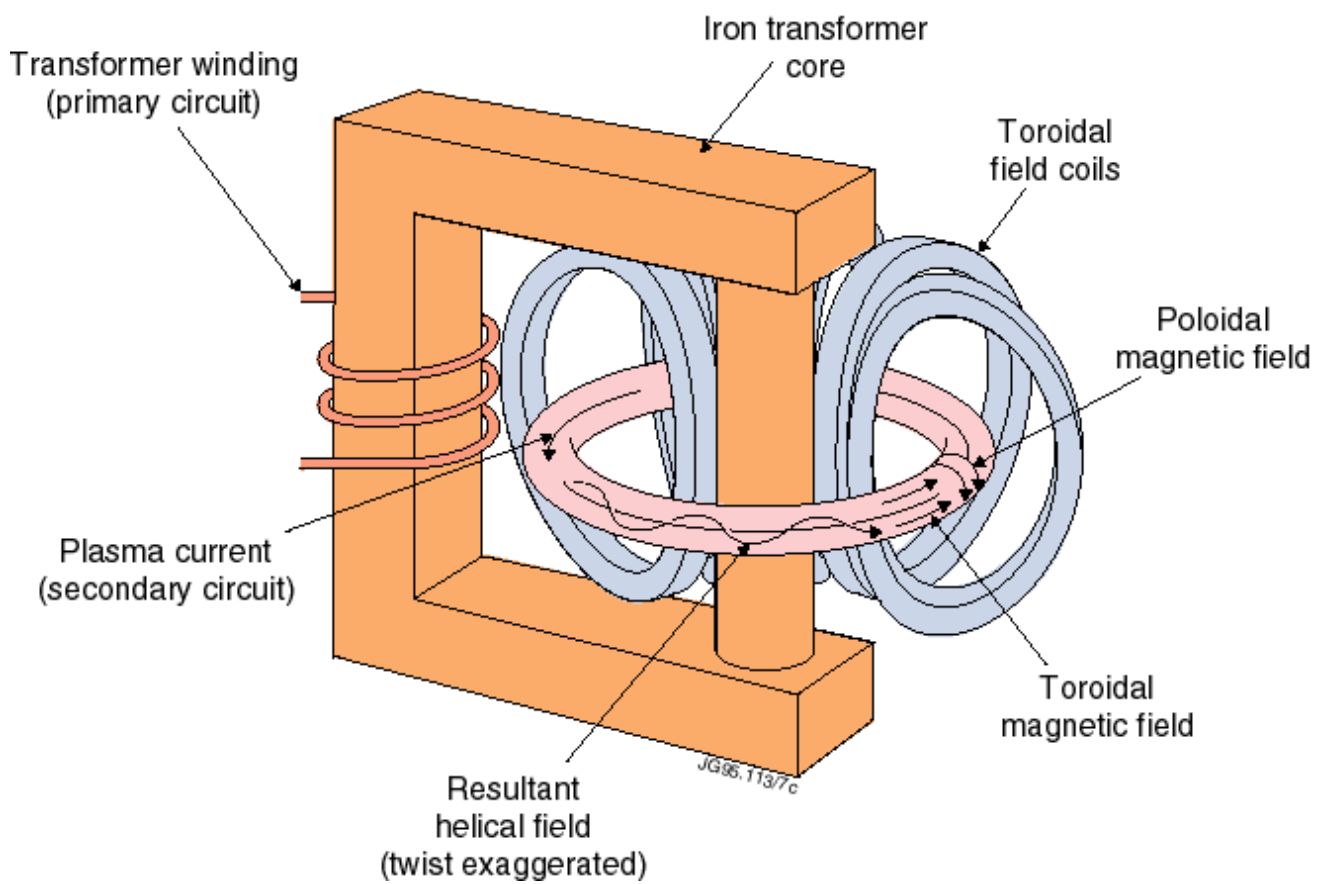
- Introduction and Background
- Working Practise
- Man power, Hardware and Software
- Problems
- Summary

^{*)} See Nuclear Fusion **34** (1994) 131.

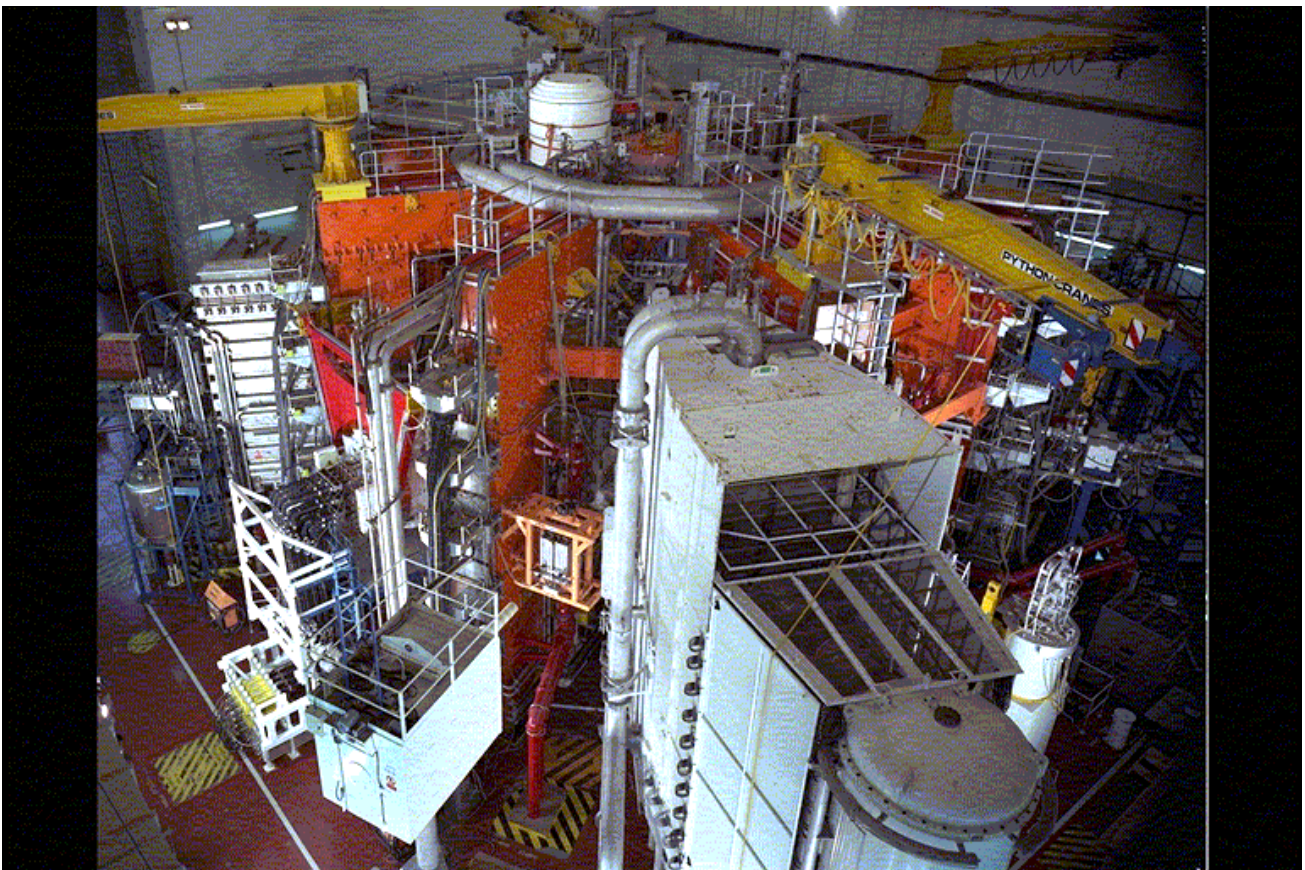
Nuclear Fusion



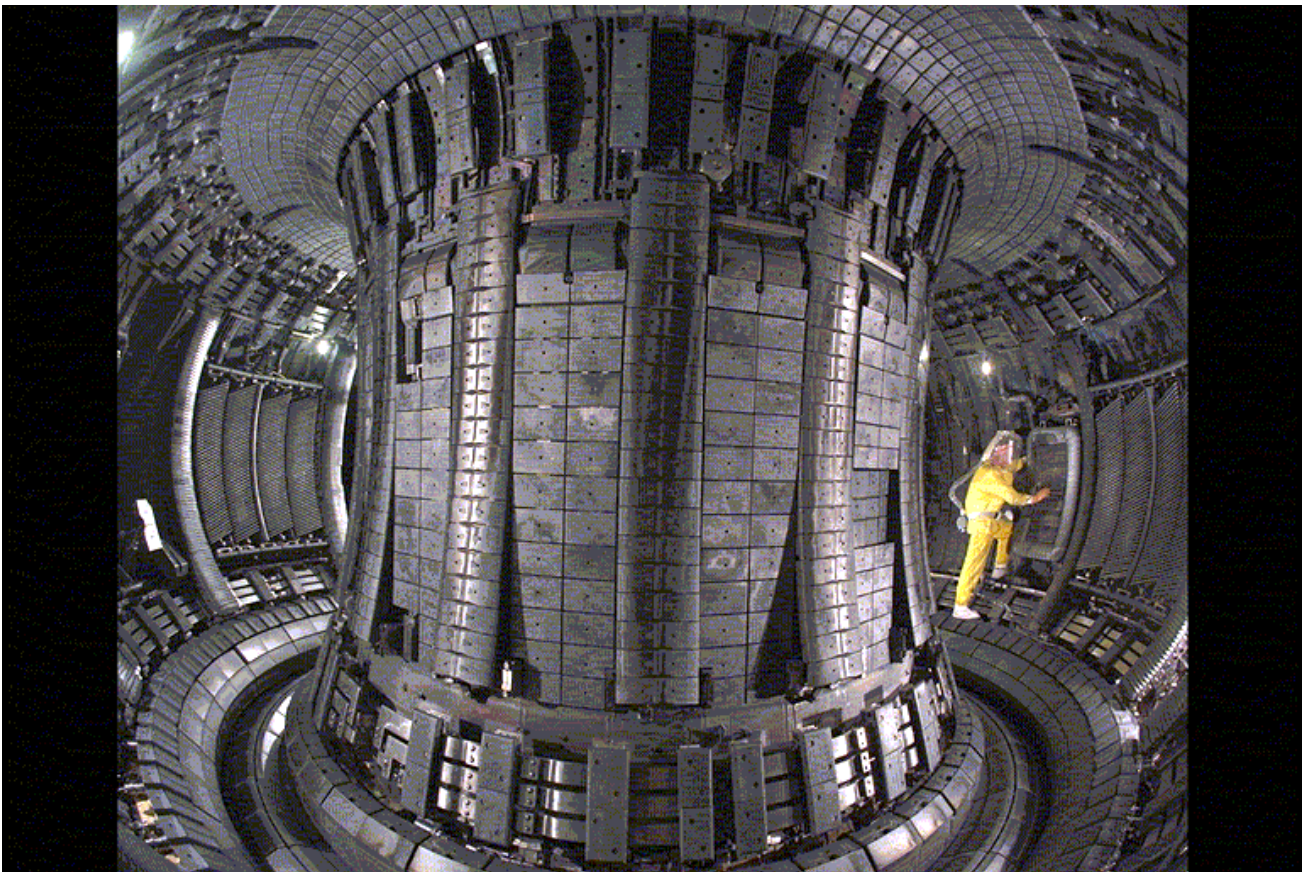
Tokamak Principle



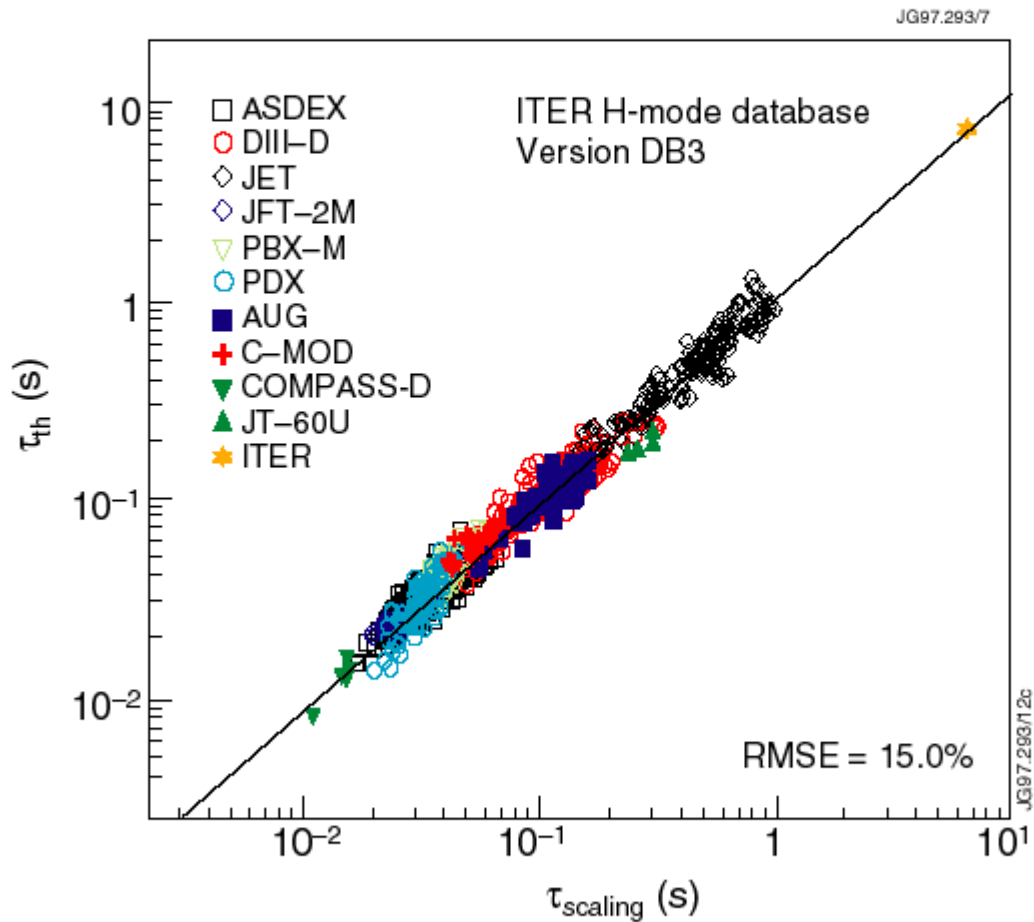
The JET Tokamak



Inside View of The JET Tokamak



Primary objective of Working Group: Predict performance of future Tokamaks



International Data Base Collaboration

L-mode

EU : ASDEX, FTU, JET, TEXTOR, START and
TORE SUPRA

JAPAN : JFT-2M and JT-60

RF : T-10

USA : C-MOD, DIII, DIII-D, PBX-M, PDX and
TFTR

H-mode

EU : ASDEX, ASDEX Upgrade, COMPASS-D,
JET and TEXTOR

JAPAN : JFT-2M and JT-60U

USA : C-MOD, DIII-D, PBX-M, PDX and TFTR

H-mode Power Threshold

EU : ASDEX, ASDEX Upgrade, COMPASS-D,
JET and TCV

JAPAN : JFT-2M and JT-60U

USA : C-MOD, DIII-D, PBX-M and PDX

Working Practise:

- **2 meetings annually at changing locations (with computer facilities)**
 - to discuss details about data and analysis
 - establish plan for work to be done

- **Means of communication**
 - 1) e-mail including a mailserver used to distribute messages to all (logged).
 - 2) Only occasionally Fax or Phone.

- **Distribution of Material**
 - 1) Data (fixed ascii format) available on FTP Server with. 3 directories of which 2 are password protected.
 - 2) Documents and Figures are made available on password protected WEB pages.

MINIMUM REQUIREMENTS

- **Man Power**
 - Computer support (full time)
 - Secretary
 - Yourself

- **Hardware**
 - One computer to be FTP and Mail Server
 - Internet access
 - Your computer

- **Software**
 - Word processor
 - Mail reader
 - WEB browser
 - Graphics tools
 - Analysis tools

Problems

- **Large data files and slow transmission lines**
 - place data on more than one FTP server

- **Different mail boxes (encryption of attachm.)**
 - use the same mail reader (eg. Eudora)

- **Use of different word processors**
 - 1) Distribution of 'final' material
 - use eg. PDF format
 - 2) Material under development
 - a) equations
 - b) paper format
 - c) headers and footnotes
 - d) symbol fonts in figures
 - keep the material as simple as possible until final step

- **Security of confidential material**
 - use password protection

Summary

- A brief account has been given of how the data base group operates and the resources that the group is using
- The main problems and how to overcome them have been described
- The real cost of this setup is determined by what each participating group has been able to afford
- The most important benefit of using the Internet is the immediate distribution of information and reduction in response time

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Where we are now

