



Sixth Technical Meeting on Fusion Data Processing, Validation and Analysis

Shanghai, China

9-12 September 2025

Ref. No.: EVT2405091

Information Sheet

Introduction

The validation and analysis of experimental data obtained from diagnostics used to characterize fusion plasmas are crucial for a knowledge-based understanding of the physical processes governing the dynamics of these plasmas. This meeting aims at fostering, in particular, discussions about research and development results that set out or underline trends observed in the current major fusion confinement devices. Accurate data processing leads to a better understanding of the physics related to fusion research. It is essential for the careful estimate of the error bars of the raw measurements and processed data.

Objectives

The objective of the meeting is to provide a platform for discussing key topics related to fusion data processing, validation, and analysis, with a particular focus on addressing the extrapolation needs for next-step fusion devices such as ITER.

Target Audience

This event is suitable for experienced scientists and young scientists working in the domain of plasma diagnostics and synthetic diagnostics data analysis.

Working Language

The working language of the event will be English. All communication and papers must be sent to the IAEA in English. No simultaneous interpretation will be provided.

Structure and Topics

The programme will consist of sessions dedicated to invited oral talks and discussions. A Programme Committee made up of a representative international membership will be responsible for selecting the invited oral presentations and arranging the technical and discussion sessions, as well as for the overall scientific content of the event. The programme will cover the following fusion data processes and techniques:

- Next Fusion Device Concepts: Data Challenges and Design Optimisation
- Information Retrieval and Visualisation
- Sensor Fusion and Integrated Data Analysis
- Inverse Problems and Image Processing
- Signal Processing and Anomaly Detection
- Physics-Based Machine Learning
- Pattern Recognition
- Data Analysis for Feedback Control
- Uncertainty Propagation, Verification and Validation

Participation and Registration

All persons wishing to participate in the event have to be designated by an IAEA Member State or should be members of organizations that have been invited to attend.

In order to be designated by an IAEA Member State, participants are requested to send the **Participation Form (Form A)** to their competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) for onward transmission to the IAEA by **30 June 2025**. Participants who are members of an organization invited to attend are requested to send the **Participation Form (Form A)** through their organization to the IAEA by the above deadline.

Selected participants will be informed in due course on the procedures to be followed with regard to administrative and financial matters.

Participants are hereby informed that the personal data they submit will be processed in line with the [Agency's Personal Data and Privacy Policy](#) and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required. The IAEA may also use the contact details of Applicants to inform them of the IAEA's scientific and technical publications, or the latest employment opportunities and current open vacancies at the IAEA. These secondary purposes are consistent with the IAEA's mandate. Further information can be found in the [Data Processing Notice](#) concerning IAEA InTouch+ platform.

Abstracts and Presentations

The IAEA encourages participants to give presentations on the work of their respective institutions that falls under the topics listed on the IAEA-INDICO website.

Participants who wish to give presentations are requested to submit an abstract of not more than 500 words through IAEA-INDICO by **30 May 2025**. Abstracts may contain figures and graphics. Instructions on how to upload the abstracts will be available on the IAEA-INDICO website.

Submissions must contain the author's name, email address, country, organization and topic. Authors are encouraged to flag their proposals as an oral or poster presentation. However, the Programme Committee will evaluate all submissions and decide on the final presentation format.

Authors will be notified of the acceptance of their proposed presentations by **30 June 2025**.

Expenditures and Grants

No registration fee is charged to participants.

The IAEA is generally not in a position to bear the travel and other costs of participants in the event. The IAEA has, however, limited funds at its disposal to help meet the cost of attendance of certain participants. Upon specific request, such assistance may be offered to normally one participant per country, provided that, in the IAEA's view, the participant will make an important contribution to the event.

The application for financial support should be made using the **Grant Application Form (Form C)**, which has to be stamped, signed and submitted by the competent national authority to the IAEA together with the **Participation Form (Form A)** by **30 June 2025**.

Venue

The event will be held at Fudan University, Shanghai, China. General information on the venue and other practical details, will be listed on the IAEA-INDICO website.

Visas

Participants who require a visa to enter China should submit the necessary application to the nearest diplomatic or consular representative of China.

Key Dates

30 May 2025 Deadline for submission of abstracts through IAEA-INDICO at <https://conferences.iaea.org/event/393/>

30 June 2025 Deadline for submission of Participation Form (Form A) and Grant Application Form (Form C) (if applicable) through the official channels. Notification of acceptance of abstracts.

Programme Committee

Geert Verdoolaege (Chair)	Belgium
Didier Mazon (Co-chair)	France
Min Xu (Host)	China
Wolfgang Biel	Germany
Rainer Fischer	Germany
Andrea Murari	Italy
Simon Pinches	ITER Organization
Masayuki Yokoyama	Japan
Michael Churchill	United States of America
Keisuke Fujii	United States of America
Pablo Rodriguez-Fernandez	United States of America
Josh Stillerman	United States of America
Jesus Vega	Spain

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Subsequent correspondence on scientific matters should be sent to the Scientific Secretary/Secretaries and correspondence on other matters related to the event to the Administrative Secretary.

Event Web Page

Participants are encouraged to visit these web pages regularly to check for new or updated information regarding the meeting:

IAEA-INDICO: <https://conferences.iaea.org/event/393/>

Participation Form

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To be completed by the participant and sent to the competent national authority (e.g. Ministry of Foreign Affairs, Permanent Mission to the IAEA, or National Atomic Energy Authority) of his/her country for subsequent transmission to the International Atomic Energy Agency (IAEA) either by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). Please also send a copy by email to the Scientific Secretary, Mr Matteo Barbarino, Division of Physical and Chemical Sciences, Department of Nuclear Sciences and Applications (Email: M.Barbarino@iaea.org) and to the Administrative Secretary, Ms Rozanne Bojdo, (Email: R.Bojdo@iaea.org).

Participants who are members of an invited organization can submit this form to their organization for subsequent transmission to the IAEA.

Deadline for receipt by IAEA through official channels as per Conference Announcement.

Family name(s): (same as in passport)	First name(s): (same as in passport)	Mr/Ms
Institution:		
Full address:		
Tel. (Fax):		
Email:		
Nationality:	Representing following Member State/non-Member State/entity or invited organization:	
If/as applicable:		
Do you intend to submit a paper?	Yes	No
Would you prefer to present your paper as a poster?	Yes	No
Title:		

Participants are hereby informed that the personal data they submit will be processed in line with the [Agency's Personal Data and Privacy Policy](#) and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required. The IAEA may also use the contact details of Applicants to inform them of the IAEA's scientific and technical publications, or the latest employment opportunities and current open vacancies at the IAEA. These secondary purposes are consistent with the IAEA's mandate. Further information can be found in the [Data Processing Notice](#) concerning IAEA InTouch+ platform.

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Family name(s): (same as in passport)	First name(s): (same as in passport)	Mr/Ms:
Mailing address:		Tel.:
		Fax:
		Email:
Date of birth (yyyy/mm/dd):		Nationality:

1. Education (post-secondary):

Name and place of institution	Field of study	Diploma or Degree	Years attended from to	

2. Recent employment record (starting with your present post):

Name and place of employer/ organization	Title of your position	Type of work	Years attended from to	

3. Description of work performed over the last three years:

4. Institute's/Member State's programme in field of event:

Date: _____ **Signature of applicant:** _____

Date: _____ **Name, signature and stamp of Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority**
