

الوكالة الدولية للطاقة الذرية 国际原子能机构 International Atomic Energy Agency Agence internationale de l'énergie atomique Международное агентство по атомной энергии Огдаліsmo Internacional de Energía Аtómica

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In reply please refer to: EVT2103420 Dial directly to extension: (+43 1) 2600-26386

The Secretariat of the International Atomic Energy Agency (IAEA) presents its compliments to the IAEA's Member States and has the honour to draw their attention to the **Second Technical Meeting on Plasma Disruptions and their Mitigation** (hereinafter referred to as "event") to be held in Saint-Paul-lez-Durance, France, from 19 to 22 July 2022.

In addition, the event will allow for virtual participation via Cisco Webex.

The purpose of the event is to serve as a forum to help coordinate experimental, theoretical and modelling work in the field of plasma disruptions with special emphasis on developing a solid basis for possible mitigation strategies in ITER and next generation fusion devices.

The attached Information Sheet provides further details of the event.

The event will be held in English.

Member States are invited to designate one or more participants to represent the Government at this event. Member States are strongly encouraged to identify suitable women 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 at the time of designating the participant(s) using the attached Grant Application Form (Form C).

It should be noted that compensation is not payable by the IAEA for any damage to or loss of personal property. The IAEA also does not provide health insurance coverage for participants in IAEA events. Arrangements for private insurance coverage on an individual basis should therefore be made. The IAEA will, however, provide insurance coverage for accidents and illnesses that clearly result from any work performed for the IAEA.

Designations should be submitted to the IAEA through the competent national authority (Ministry of Foreign Affairs, Permanent Mission to the IAEA or National Atomic Energy Authority) not later than **5 June 2022** using the attached Participation Form (Form A). Completed and authorized Participation Forms should be sent either by email to: Official.Mail@iaea.org or by fax to: +43 1 26007 (no hard copies needed). Copies should be sent by email to the Scientific Secretary of the event, 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, Mr Rubén Gómez Zaragoza (Email: R.Gomez-Zaragoza@iaea.org). The Scientific Secretary of the event will liaise with the participants directly concerning further arrangements, including travel details, as appropriate, once the official designations have been received.

Should Governments wish, in addition, to appoint one or more observers to assist and advise the designated participants, they are kindly requested to inform the IAEA of the names and contact details of any such observers by the above date. In accordance with the established rules, Governments are expected to bear the cost of attendance of any observers they may send to IAEA events. Compensation is not payable by the IAEA for any damage to or loss of observers' personal property or for illness, injury or death occurring while travelling to or in connection with their attendance at IAEA events.

The IAEA takes no responsibility for, and the provider of the virtual meeting services has represented and warranted that the Services shall not contain, and that no end user shall receive from the software used to hold the virtual meeting, any virus, worm, trap door, back door, timer, clock, counter or other limiting routine, instruction or design, or other malicious, illicit or similar unrequested code, including surveillance software or routines which may, or is designed to, permit access by any person, or on its own, to erase, or otherwise harm or modify any data or any system, server, facility or other infrastructure of any end user (collectively, a "Disabling Code").

The Secretariat of the International Atomic Energy Agency avails itself of this opportunity to renew to the IAEA's Member States the assurances of its highest consideration.



2022-05-24

Enclosures: Information Sheet

Participation Form (Form A) Form for Submission of a Paper (Form B) Grant Application Form (Form C)



Second Technical Meeting on Plasma Disruptions and their Mitigation

Hosted by the Government of France

through the ITER Organization

ITER Headquarters Saint-Paul-lez-Durance, France and virtual participation via Cisco Webex

19-22 July 2022

Ref. No.: EVT2103420

Information Sheet

Introduction

Nuclear fusion is recognized as a long-term energy source. The IAEA plays an important role in nurturing research and development (R&D) on nuclear fusion by: (i) fostering and coordinating the exchange of scientific and technical information on nuclear fusion through conferences, meetings and projects; and (ii) establishing and maintaining internationally recommended numerical databases of fundamental atomic and molecular data for nuclear fusion.

The most important initiative on fusion R&D is currently ITER: the international tokamak reactor scale experiment being assembled in France. In tokamaks, instabilities can develop under certain operational conditions or as a consequence of a loss of plasma control. These instabilities eventually lead to the rapid loss of thermal and magnetic energy, a phenomenon known as plasma disruption.

Plasma disruptions cause thermal and mechanical loading to the tokamak components. Due to the high amounts of stored thermal and magnetic energies in ITER, the in-vessel components, such as the first wall panels and the divertor, will receive significant thermal loads. Furthermore, the in-vessel components, the vacuum vessel and the coils in the tokamak must also bear substantial mechanical

loads. Disruption mitigation will be essential to reducing thermal and mechanical loading in order to guarantee the lifetime of these components.

Objectives

The event aims to serve as a forum to help coordinate experimental, theoretical and modelling work in the field of plasma disruptions with special emphasis on developing a solid basis for possible mitigation strategies in ITER and next generation fusion devices.

Target Audience

The event aims to bring together junior and senior scientific fusion project leaders, plasma physicists, including theoreticians and experimentalists, and experts (researchers and engineers) in the field of plasma disruptions.

Working Language(s)

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 mainly consist of sessions dedicated to invited talks and discussions. A Programme Committee made up of a representative international membership will be responsible for selecting the talks and arranging the technical and discussion sessions, as well as for the overall scientific content of the event.

In addition, several regular contributions (see below for further information) will be presented on the following topics:

- Mitigation:
 - Shattered pellet injection;
 - Alternative techniques.
 - **Prediction and Avoidance:**
 - Machine learning and physics approaches;
 - Avoidance: control aspects.
- Consequences:
 - Electromagnetic loads;

- Heat loads;
- Runaway electrons.

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 **5 June 2022**. 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.

All persons wishing to present a contribution at the event are requested to send the **Participation Form** (Form A) together with Form for Submission of a Paper (Form B) through the established official channels 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.

Please note that the IAEA is in a transition phase to manage the entire registration process for all regular programme events electronically through the new InTouch+ (https://intouchplus.iaea.org) facility, which is the improved and expanded successor to the InTouch platform that has been used in recent years for the IAEA's technical cooperation events. Through InTouch+, prospective participants will be able to apply for events and submit all required documents online. National authorities will be able to use InTouch+ to review and approve these applications. Interested parties that would like to use this new facility should write to: InTouchPlus.Contact-Point@iaea.org.

Abstracts and Proceedings

Concise regular contributions (oral and poster presentations) that fall within the topics outlined above may be submitted to the event. Anyone wishing to present a regular contribution at the event is requested to submit an abstract of not more than 500 words through IAEA-INDICO by **5** June 2022. 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 by email by **10 June 2022** as to whether their abstracts have been accepted.

An electronic copy of the proceedings, consisting of abstracts, presentation slides and posters will be made available to all participants on the IAEA Fusion Portal.

Under the coordination of the Chair of the Programme Committee, a summary paper will be published in the IAEA journal *Nuclear Fusion*.

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 **5 June 2022**.

Grant awards will be announced by **10 June 2022**.

Event Venue and Accommodation

The event will be held at the ITER Organization's headquarters, Route de Vinon-sur-Verdon, 13067 Saint-Paul-lez-Durance, France. Participants must make their own travel and accommodation arrangements.

Local organizer contact: ITERmeeting@iter.org

Recommended accommodation:

Hotels:

Hotel Rotonde: <u>Hotel Rotonde</u> Hotel St Christophe: <u>Hotel St-Christophe</u> Hotel Aquabella: <u>Hotel Aquabella</u> Hotel des Augustins: <u>Hotel des Augustins</u> Hotel du Globe: <u>Hotel du Globe</u> Hotel des Quatre Dauphins: <u>Hotel des Quatre Dauphins</u>

Aparthotels:

Aparthotel Adagio Aix-En-Provence Centre: <u>Aparthotel Adagio</u> Séjours & Affaires Mirabeau: <u>Séjours&Affaires</u> Appart'hôtel Odalys Les Floridianes:<u>Odalys Floridianes</u>

Transportation between Aix-en-Provence and the event venue will be arranged by the local organizer. Participants will have to register for this service using a registration form to be provided by the local organizer in due course.

Visas

Participants who require a visa to enter France should submit the necessary application as soon as possible to the nearest diplomatic or consular representative of France.

Key Deadlines and Dates

5 June 2022	Deadline for submission of abstracts through IAEA-INDICO
5 June 2022	Deadline for submission of Participation Form (Form A), Form for Submission of a Paper (Form B) and Grant Application Form (Form C) (if applicable) through the official channels
10 June 2022	Notification of acceptance of abstracts and of assigned awards
19 July 2022	Event begins
22 July 2022	Event ends

Programme Committee

The International Programme Advisory Committee is composed of the following members:

Mr Michael Lehnen (Chair)	ITER Organization		
Mr Indranil Bandyopadhyay	India		
Mr Amitava Bhattacharjee	United States of America		
Mr Nicholas Eidietis	United States of America		
Mr Alexander Huber	Germany		
Mr Jayhyun Kim	Republic of Korea		
Mr Sergey Konovalov	Russian Federation		
Mr Akinobu Matsuyama	Japan		
Mr Eric Nardon	France		
Ms Gabriella Pautasso	Germany		
Ms Cristina Rea	United States of America		
Mr Carlo Sozzi	Italy		

Mr Fabio Villone	Italy
Mr Long Zeng	China

IAEA Contacts

Scientific Secretary:

Mr Matteo Barbarino

Division of Physical and Chemical Sciences Department of Nuclear Sciences and Applications International Atomic Energy Agency Vienna International Centre PO Box 100 1400 VIENNA AUSTRIA

Tel.: +43 1 2600 26386 Fax: +43 1 26007 Email: <u>M.Barbarino@iaea.org</u>

Administrative Secretary:

Mr Rubén Gómez Zaragoza

Division of Physical and Chemical Sciences Department of Nuclear Sciences and Applications International Atomic Energy Agency Vienna International Centre PO Box 100 1400 VIENNA AUSTRIA

Tel.: +43 1 2600 26393 Fax: +43 1 26007 Email: <u>R.Gomez-Zaragoza@iaea.org</u>

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

Host Organization Contact Point

Chairperson:

Mr Michael Lehnen ITER Organization Saint-Paul-lez-Durance Cedex FRANCE Email: <u>ITERmeeting@iter.org</u>

Meeting Web Pages

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/281/



Participation Form

Second Technical Meeting on Plasma Disruptions and their Mitigation

Saint-Paul-lez-Durance, France and virtual participation via Cisco Webex

19–22 July 2022

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: <u>Official.Mail@iaea.org</u> or by fax to: +43 1 26007 (no hard copies needed). Please also send a copy by email to the Scientific Secretary <u>M.Barbarino@iaea.org</u> and to the Administrative Secretary <u>R.Gomez-Zaragoza@iaea.org</u>.

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: 5 June 2022

Family name(s): (same as in	n passport)	First name(s): (same	e as in passport)	Mr/Ms	
Institution:		L			
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 positive.		ster? Yes	No 🗌		
I plan to attend virtually:		Yes 🗌	No 🗌		

Participants are hereby informed that the personal data they submit will be processed in line with the <u>Agency's Personal Data and Privacy Policy</u> and is collected solely for the purpose(s) of reviewing and assessing the application and to complete logistical arrangements where required.



Form for Submission of a Paper

Second Technical Meeting on Plasma Disruptions and their Mitigation

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19–22 July 2022

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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: 5 June 2022

Title of the paper:					
If applicable: Abstract ID in IAEA-INDICO:					
Family name(s) and first name(s) of all author(s) (same as in passport(s):	Scientific establishment(s) in which the work has been carried out		City/Country		
1.					
2.					
3.					
Family name(s) and first name(s) of author presenting the paper (same as in passport):Mr/Ms:					
Mailing address:					
Tel. (Fax):					
Email:					

I plan to attend virtually: Yes No					
I hereby agree to assign to the International Atomic Energy Agency (IAEA):					
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the non-exclusive, worldwide, free-of-charge licence (this option is only for those authors whose parent institution does not allow them to transfer the copyright for work carried out in that institution) granting the IAEA world rights for the use of the aforementioned material in this and any future editions of the publication, in all languages, and in all formats available now, or to be developed in the future (digital formats, hard copy etc.).					
Please note: If granting the licence mentioned above, please supply any copyright acknowledgement text required.					
Furthermore, I herewith declare:					
that the material submitted to the IAEA is original, except for such excerpts from copyrighted works as may be included with the permission of the copyright holders thereof, has been written by the stated authors, has not been published before, and is not under consideration for publication by another entity;					
that any permissions and rights to publish required for third-party content, including but not limited to figures and tables, have been obtained, that all published material is correctly referenced; and					
that the material submitted to the IAEA does not contain any libellous or other unlawful statements and does not contain any materials that violate any personal or proprietary rights of any person or entity.					
Date: Signature of main author:					



Grant Application Form

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19–22 July 2022

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Deadline for receipt by IAEA through official channels: 5 June 2022

Family name(s): (same as in passport)	First name(s): (same as in passport)		Mr/Ms:
Mailing address:		Tel.:	
		Fax:	
		Email:	
Date of birth (yy/mm/dd):		Nationality:	
I plan to attend virtually:		Yes No	

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 wor from	rked 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