

Technical Meeting on Compound Nuclear Reactions and Related Areas

IAEA Headquarters Vienna, Austria

8 - 12 July 2024

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Information Sheet

Background

Compound nuclear reactions have relevance across a wide spectrum of fields in both fundamental nuclear physics research and nuclear applications. These applications encompass nuclear fission and fusion energy technologies, waste management and non-proliferation, medical applications, environmental monitoring, and preservation of cultural heritage. They all rely on simulations of the nuclear processes at their core to assess factors such as nuclei production, radiation emission, material damage, dosimetry, etc. Understanding the behaviour of ions in matter and radiation characteristics can only be achieved through precise modelling of the fundamental nuclear processes that underlie them. The models and data essential for modelling compound nuclear reactions are continuously developing and improving, driven by advancements in fundamental research and the evolving demands of emerging applications.

The Technical Meeting on Compound Nuclear Reactions and Related Areas brings together nuclear physicists from various research areas to discuss advancements in experiments, theory, statistical methods, and nuclear data related to compound nuclear reactions. The primary goal is to create a platform for the exchange of knowledge and techniques, foster collaboration and share potential opportunities.

Participants are invited to submit an abstract of their research, to be presented either as an oral contribution or as a poster.

Objectives

- Evaluate the current progress of experiments, theoretical research, and nuclear data pertaining to compound nuclear reactions and emerging research domains.
- Facilitate knowledge exchange and networking among nuclear scientists across diverse disciplines to recognize shared interests, promote cooperation, and explore collaborative prospects.
- Provide guidance and mentorship to early-career researchers.
- Document the meeting's outcomes and publish them in an appropriate journal.

Target Audience

Research scientists, at any stage of their career, who are involved in the quantitative study, analysis, modelling or prediction of compound nuclear reactions and related areas including experimental nuclear physics, statistical methods, and nuclear data evaluation. Experimental and theoretical approaches are welcomed.

The IAEA is committed to the promotion of gender equality in all its activities and qualified women scientists are particularly encouraged to participate in the meeting.

Working Language(s)

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

Topics

- Nuclear reaction mechanisms (direct, compound, pre-equilibrium, other)
- Nuclear fission
- Statistical Hauser-Feshbach theory
- Surrogate methods
- Optical model
- Level densities and photon strength functions
- R-matrix theory and connecting resolved resonances with statistical regime
- Nuclear structure for nuclear reactions
- Measurements relevant to compound-nuclear reactions (direct and indirect)
- Nuclear data evaluation and dissemination
- Applications in nuclear astrophysics, energy, medical physics etc.
- Experimental facilities

Participation and Registration

All persons wishing to participate in the event must be designated by an IAEA Member State or should be a member of an organization that has been invited to attend. The procedure for getting designated by an IAEA Member State is outlined below:

Registration through the InTouch+ platform:

- 1. Access the InTouch+ platform (https://intouchplus.iaea.org):
 - Persons with an existing NUCLEUS account can <u>sign in here</u> with their username and password;
 - Persons without an existing NUCLEUS account can register here.
- 2. Once signed in, prospective participants can use the InTouch+ platform to:
 - Complete or update their personal details under 'Basic Profile' (if no financial support is requested) or under 'Complete Profile' (if financial support is requested) and upload the relevant supporting documents;
 - Search for the relevant event (EVT) under the 'My Eligible Events' tab;
 - Select the Member State or invited organization they want to represent from the drop-down menu entitled 'Designating authority' (if an invited organization is not listed, please contact Conference.Contact-Point@iaea.org);
 - If applicable, indicate whether a paper is being submitted and complete the relevant information;
 - If applicable, indicate whether financial support is requested and complete the relevant information (this is not applicable to participants from invited organizations);
 - Based on the data input, the InTouch+ platform will automatically generate Participation Form (Form A), Form for Submission of a Paper (Form B) and/or Grant Application Form (Form C);
 - Submit their application.

Once submitted through the InTouch+ platform, the application together with the auto-generated form(s) will be transmitted automatically to the required authority for approval. If approved, the application together with the form(s) will automatically be sent to the IAEA through the online platform.

NOTE: Should prospective participants wish to submit a paper or request financial support, the respective forms (Forms B and C) need to be submitted together with the submission of the application (Form A), by 29 February 2024.

For additional information on how to apply for an event, please refer to the <u>InTouch+ Help</u> page. Any other issues or queries related to InTouch+ can be sent to <u>InTouchPlus.Contact-Point@iaea.org</u>.

If it is not possible to submit the application through the InTouch+ platform, prospective participants are requested to contact the IAEA's Conference Services Section via email: Conference.Contact-Point@iaea.org and or the event organisers: Paraskevi Dimitriou, P.Dimitriou@iaea.org or Kira Nathani@iaea.org

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. Further information can be found in the <u>Data Processing Notice</u> concerning IAEA InTouch+ platform.

Papers and Presentations

The IAEA encourages participants to give presentations on the work of their respective institutions that falls under the topics listed in above Topics section.

Participants who wish to give presentations are requested to submit an abstract of their work. The abstract will be reviewed as part of the selection process for presentations. The abstract should be in A4 page format, should extend to no more than one page (including figures and tables) and should not exceed 500 words. It should be sent electronically through INDICO (see URL below), not later than 29 February 2024. Authors will be notified of the acceptance of their proposed presentations by 31 March 2024.

In addition, participants have to submit the abstract together with the Participation Form (Form A) and the attached Form for Submission of a Paper (Form B) through the InTouch+ platform as indicated above not later than 29 February 2024.

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 submitted to the IAEA together with the Participation Form (Form A) via InTouch+ platform by 29 February 2024.

Grant awards will be announced by 31 March 2024.

Venue

The event will be held at the Vienna International Centre (VIC), where the IAEA's Headquarters are located. The meeting room is Boardroom A in the M building.

Participants must make their own travel and accommodation arrangements.

General information on the VIC and other practical details, such as a list of hotels offering a reduced rate for IAEA participants, are listed on the following IAEA web page: http://www-pub.iaea.org/iaeaevents/GeneralInfo/Guide/VIC.

Participants are advised to arrive at Checkpoint 1/Gate 1 of the VIC one hour before the start of the event on the first day in order to allow for timely registration. Participants will need to present an official photo identification document in order to be admitted to the VIC premises.

Visas

Participants who require a visa to enter Austria should submit the necessary application to the nearest diplomatic or consular representative of Austria at least four weeks before they travel to Austria. Since Austria is a Schengen State, persons requiring a visa will have to apply for a Schengen visa. In States where Austria has no diplomatic mission, visas can be obtained from the consular authority of a Schengen Partner State representing Austria in the country in question.

Key Deadlines and Dates

29 February 2024	Deadline for submission of abstracts through IAEA-INDICO for regular contributions
29 February 2024	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 InTouch+ platform
31 March 2024	Notification of acceptance of abstracts and of grants
30 June 2024	Deadline for uploading slides on INDICO
8 July 2024	Event begins
12 July 2024	Event ends

Organization

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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

Event Web Page

Abstracts should be submitted via the event web page below. Please visit the following IAEA web page regularly for new information regarding this event:

https://conferences.iaea.org/event/368/