Second Circular

25th European Conference on Few-Body Problems in Physics



The <u>25th European Conference of Few-Body Problems in Physics</u>—EFB25—will be held in Mainz (Germany) from July 30th through August 4th, 2023.

Previous conference of this series took place in Guildford (2019), Aarhus (2016), Krakow (2013), Salamanca (2010), and Pisa (2007).



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EFB25 will give the possibility to present and discuss recent developments in the areas of:

- Hadron physics
- Nuclei and hypernuclei
- Electroweak processes
- Nuclear astrophysics
- Cold atoms and quantum gases
- Atoms and molecules
- Few-body methods
- Few-body aspects of many-body systems.

International Advisory Committee:

Aldo Antognini (Switzerland), Doerte Blume (USA), Arnoldas Deltuva (Lithuania), Dimitri Fedorov (Denmark), Christian Forssen (Sweden), Jacek Golak (Poland), Renato Higa (Brazil), Emiko Hiyama (Japan), Calvin Howell (USA), Rituparna Kanungo (Canada), Lev Khaykovich (Israel), Alejandro Kievsky (Italy), Stanislaw Kistryn (Poland), Mantile Leslie Lekala (South Africa), Judith McGovern (UK), Ulf-G. Meissner (Germany), Filomena Nunes (USA), Giuseppina Orlandini (Italy), Nigel Orr (France), Assumpta Parreno (Spain), Saori Pastore (USA), Teresa Pena (Portugal), Willibald Plessas (Austria), Jean-Marc Richard (France), Kimiko Sekiguchi (Japan), Nina Shevchenko (Czech Republic), Natasha Timofeyuk (UK), Zhao Qiang (China), Ubirajara van Kolck (France).

Program

The traditional structure of Few-Body Conferences with five days, from Monday to Friday, will be maintained. We will have plenary sessions in the mornings and parallel sessions in the afternoons. There will be an excursion with conference dinner on Wednesday and a visit to the experimental facilities on Friday. We have already selected invited speakers for plenary and parallel sessions on the basis of recommendations of the IAC. The list of invited speakers can be found below.

Invited Plenary Speakers (30 min talks + 5 min discussion time)

Bijaya Acharya (USA) Aldo Antognini (Switzerland) Doerte Blume (USA) Wouter Dekens (USA) Meytal Duer (Germany) Evgeny Epelbaum (Germany) Hayan Gao (USA) Chloe Hebborn (USA) Emiko Hiyama (Japan) Chen Ji (China) Niels Kjærgaard (New Zealand) Sebastian König (USA) Rimantas Lazauskas (France) Niels Madsen (UK) Miguel Margues (France) Ulf-G. Meissner (Germany) Khepani Raya Montano (Spain) Sofia Quaglioni (USA) Alejandro Saenz (Germany) Karin Schonning (Sweden) Kimiko Sekiguchi (Japan) Dam Son (USA) Alex Tichai (Germany) Javier Vijande (Spain) Michele Viviani (Italv) Hartmut Wittig (Germany)

Invited Lead Parallel Speakers (25 min talks + 5 min discussion time)

Carlo Bruno (UK) Lauriane Chomaz (Germany) Lorenzo Contessi (France) Gernot Eichmann (Portugal) Tobias Frederico (Brazil) Mario Gattobigio (France) Alex Gnech (Italy) Mario Gomez-Ramos (Spain) Phillip Imgram (Belgium) Maksim Kunitski (Germany) Hoai Le (Germany) Anna McCoy (USA) Meera Parish (Australia) Izabela Skwira-Chalot (Poland) Michal Tomza (Poland) Artem Volosniev (Austria) Matteo Vorabbi (UK)

We will have two special sessions focusing on the proton radius problem and the observation of resonance-like correlations in the four-neutron system.

In order to promote fundamental research on few-body problems in physics and chemistry the fourth edition of the "Few-Body Systems Award for Young Researchers" will be given to three young researchers. As in the other editions, this award is sponsored by Springer, publisher of Few-Body Systems. The winners will have the opportunity to present their work at the Conference.

The ceremony of the second edition of the Faddeev Medal will take place at the conference. The Faddeev Medal was inaugurated in 2016 by the Topical Group on Few-Body Systems & Multi-particle Dynamics of the American Physical Society and the European Research Committee on Few-Body Problems in Physics. It is co-sponsored by the journal Few-Body Systems, published by Springer. The recipient of the Faddeev Medal 2021, Prof. Evgeny Epelbaum, will present his work during the ceremony.

Contributed talks (15 min + 5 min discussion time) will be selected on basis of the submitted abstracts. Abstract submission will open on March 1st, 2023. We will also have a poster session where the three best posters will be selected and awarded a cash prize kindly offered by NuPECC.

On Tuesday evening, we will have a public lecture given by Prof. Ulrich Stroth on "A Sun on Earth – Nuclear Fusion as a CO₂-free Energy source", also kindly sponsored by NuPECC.

Host institutions and Venue

The EFB25 conference is organized by the Johannes Gutenberg University Mainz and the Technical University Darmstadt. The venue is on the campus of the Johannes Gutenberg University Mainz at the address <u>Johann-Joachim-Becher-Weg 3</u>, <u>55128 Mainz</u>. The Campus is located 10 away by bus from the Mainz city center.

Accommodation

Mainz offers many possibilities for accommodation which you can find via the usual booking portals. We arranged for reduced rates at some hotels during the time of the conference which are listed at this link. If you choose one of these hotels please book directly via the link to benefit from the reduced rates. When you book, please mention that you are participating to the "European Few-Body Conference 2023". These reduced rates will be kept for us until June 14th, 2023. After this date, participants will have to find their own accommodation at the usual price found online. In Mainz, early booking is highly advisable.

About Mainz

The capital of the federal state of Rhineland-Palatinate, Mainz is conveniently close to the Frankfurt International Airport, with regular train connections and an outstanding public transportation system. Mainz is a vital central location for business and media, including Germany's leading public television station, ZDF. Mainz is also a well-known convention center and welcomes tourists from all over the world.

Mainz, with its towering cathedral, boasts a rich history spanning 2,000 years and maintains a young and vibrant atmosphere thanks to its university and its special Mainz flair. Mainz is, after all, the "carnival capital" of Germany. Carnival festivities take place starting in November and culminate in the Rose Monday Parade in February, an event that draws over half a million spectators. Visitors to Mainz can pay homage to the city's most renowned citizen, Johannes Gutenberg, by watching a replica of the first printing press in action. Cruise boats offer excursions along the Rhine River where one can gaze at the medieval castles perched on the cliffs overlooking the river and marvel at the steep vineyards, where the grapes for the world-class Riesling wines are grown and harvested by hand. Many visitors like to include a visit to the famous Eberbach monastery. An increasingly popular tradition takes place every Saturday morning at the farmer's market in the main square of town, where people of all ages gather for the Marktfrühstück and enjoy food and wine from local producers.

Conference Dinner and Excursion

On Wednesday August 1st, we will have an excursion and the conference dinner in the evening. Details will be provided on the conference web page in due time.

Visit to the Labs

On Friday August 4th after all the talks we will organize some visits to the laboratories, e.g. to GSI/FAIR and MAMI/ MESA. More information will be available on the web page in due time. The number of people allowed for the visit will be limited for safety reasons. The selection will be based on the first come first serve policy. Inquires about the interest will take place at the registration desk at the start of the conference.

Registration and Conference Fee

Registration Types	Early Registration*	Normal Registration
General Participant	€500	€550
Student**	€350	€400

* To qualify for our early bird rate, payments should be received before May 1st, 2023.

** An email from the supervisor to the organizers is required to confirm the status.

Registration opens on the 1st of March and ends on 30th of June, 2023. The fee package includes:

- Welcome Reception
- Scientific Sessions
- Public Lecture
- Poster Session
- Coffee Breaks and Lunches
- Excursion and Conference Dinner
- · Weekly Bus Ticket

• Visit to the Labs (only limited number of people).

Instructions for Registration

You will be able to **register** following the instructions on the web page: <u>https://indico.him.uni-mainz.de/e/efb25</u>. After registering, please proceed to pay the fee. Before submitting an abstract, you need to **request an INDICO account** on our server by visiting <u>indico.him.uni-mainz.de</u> and clicking the login button on the upper right corner. The request of a new account is automatically sent to us and will be approved as soon as possible. Please use your institutional email address to register. Addresses from gmail, hotmail, and similar providers are blocked by default.

To **submit an abstract**, please follow the instructions and send it in simple text mode. You will be notified about the status of the review of your abstract, which can be selected for a talk or a poster. If you directly want to present a poster, please write it in the comment box when you submit your abstract.

Cancellations and refunds

Any cancellation and requests for refunds concerning registration payment must be communicated to efb25@unimainz.de. The registration fee will be refunded (with a deduction of 10% to cover the handling costs) when participation is withdrawn in a written form before June 1st, 2023.

Visa invitation letter request

If you would like to receive a letter of invitation, please contact us at efb25@uni-mainz.de. You must take the letter of invitation to your nearest consulate or embassy to apply for visa.

Financial Support

We have some funds allocated to help people who would like to come to the conference and require financial support. We envisage being able to support part of the accommodation costs and/or travel costs in some selected cases. Requests should be sent to <u>efb25@uni-mainz.de</u> with a brief justification of the need and will be evaluated on a case-by-case basis. If you are a student and need financial support, please select the Niu Mood hotel (1.8 km away from the conference, i.e. 23 min walking) and have your supervisor send a letter to <u>efb25@uni-mainz.de</u> explaining why financial support is needed. Requests for support should be sent by May 15th, 2023 and the decision will be announced by May 30th, 2023.

Deadlines

March 1st, Registration and Call for Abstracts open
May 1st, Early birds fees ends
May 15th, Abstract submission ends
May 30th, Abstract acceptance or rejection is announced
June 2nd, Deadline for partial refund of registration
June 14th, Deadline to profit of the hotel discounted rate
June 30th, Registration ends

We are looking forward to welcome you in Mainz!

The Local Organizing Committee: Sonia Bacca, Mainz (Co-chair), Hans-Werner Hammer, Darmstadt (Co-chair), Tom Aumann, Luca Doria, Kai Hebeler, Harvey Meyer, Wilfried Nörtershäuser, Alexandre Obertelli, Thomas R. Richardson, Achim Schwenk, Joanna E. Sobczyk, Marc Vanderhaeghen.