

Modern Techniques in Hadron Spectroscopy

July 15-27, 2024

3rd Circular

General information

This second circular provides detailed organizational information for your participation in the graduate summer school “Modern Techniques in Hadron Spectroscopy” at Ruhr University Bochum (RUB), Germany, scheduled for July 15 to 27, 2024. For up-to-date information and the complete event schedule, please visit the school's website:

<https://indico.gsi.de/event/19202/>

Event Organizers

SERGI GONZALEZ-SOLIS, University of Barcelona
MIKHAIL MIKHASENKO, Ruhr University Bochum
ALESSANDRO PILLONI, University of Messina
ARKAITZ RODAS, Old Dominion University

Local Support

DANIELA KLOBES, Ruhr University Bochum
CLAUDIUS SCHNIER, Ruhr University Bochum

Supporting Organizations



RUB

Ruhr University Bochum



ExoHad Collaboration, Indiana University



NRW-FAIR Network



University of Giessen, Helmholtz Forschungsakademie Hessen für FAIR



Jefferson Laboratory



Joint Physics Analysis Center



Indiana University

Registration and Fee

If you are having problems with visa and you might cancel your participation, please let us know ASAP. For any registration-related inquiries or confirmation of your registration status, please contact the organizers.

The registration fee of 200 euros is payable **by bank transfer (preferable) or** in cash on Monday (15/07) at the registration desk. **Details about the bank transfer have been sent to the participants.** Receipts will be issued during the event. Please let us know if you need specific wording in the receipts.

Scientific program

The program has been finalized on the [Indico page](#). Morning lectures (9am-12pm) will be followed by afternoon exercise sessions and seminars (2-5pm). **The material for the exercises will be published online. Note that some exercises require running a python installation.** Sunday July 21, 2024 will be free.

Flash talks. Students are recommended to present themselves in a three-minutes flash talks (two-slides) on Monday 15 and Wednesday 17 afternoon.

Venue

The school will take place at the Ruhr University Bochum (RUB) [campus](#), located in North Rhine-Westphalia, Germany. Situated at the south of the city, the campus is directly accessible via the U35 tram line, approximately a 15-minute ride from the city center. Due to the high occupancy level of the campus with regular teaching activities, the location of the rooms will change daily. Lectures and exercise sessions will be held in a single room each day to minimize disruption. The specific rooms assigned for each day of the school are given in Table 1 and marked in Fig. 1.

Table 1: Location of the school events throughout the program. Each room number consists of two letters indicating the building, followed by two digits for the floor, and three digits denoting the specific auditorium.

Week 1	Room	Week 2	Room
15.07.24 (Mon)	IA 02/460	22.07.24 (Mon)	ID 03/411
16.07.24 (Tue)	ID 03/653	23.07.24 (Tue)	ID 03/411
17.07.24 (Wed)	ID 04/653	24.07.24 (Wed)	ID 03/411
18.07.24 (Thu)	ID 04/445	25.07.24 (Thu)	ID 03/411
19.07.24 (Fri)	ID 03/445	26.07.24 (Fri)	ID 03/411
20.07.24 (Sat)	GABF 04/511		
21.07.24 (Sun)	Day off		

Transportation

Getting to Bochum is straightforward with several convenient transportation options:

- **Airports:** The nearest airports are Düsseldorf International Airport (DUS), and Dortmund Airport (DTM). The Cologne Bonn Airport (CGN) is about 1.5h away. It takes about three hours to reach Amsterdam Airport (AMS) by train.
- **Trains:** Regular trains from major cities across Germany leave from and arrive to Bochum Central Station (Bochum Hauptbahnhof). A DB Navigator is a reliable app for obtaining up-to-date information on the train schedule.
- **49-Euro-Ticket:** For unlimited travel within Germany, consider purchasing the [49-Euro-Ticket](#), valid for the entire month of July. This ticket covers all regional trains, trams and busses.

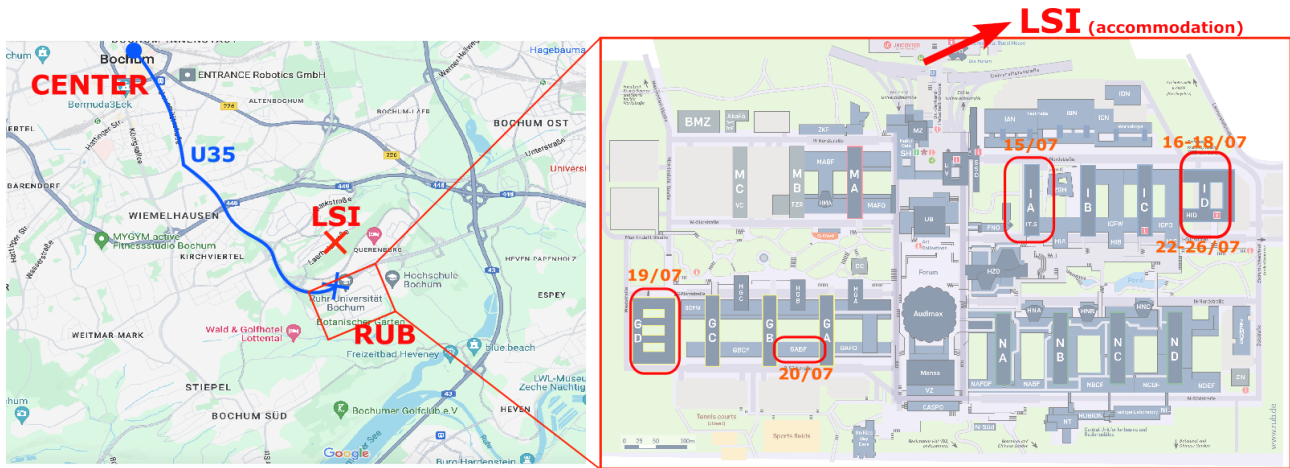


Figure 1: Left: map of south part of Bochum, indicating the school venue (RUB), city center (CENTER), accommodation place (LSI), and tram connection line. Right: schematic view of the RUB campus.

- **Local Transport:** The U35 line provides a direct connection between the city center and the RUB campus.

Accommodations

Participants will be accommodated in single rooms (breakfast included) at [Landesspracheninstitut Gästehaus \(LSI\)](#). The facility is located at walking distance, of about 20 minutes from the lecture halls. The reception is open from Monday to Saturday. **Keys will be distributed by organizers at the facility on Sunday 14h-15h, 18h-19h, and after 21h at the GABF 04/511 where the Euro 2024 Final will be shown.** The Accommodations are booked based on the arrival and departure dates you provided during [your registration](#). If there are any changes to your travel plans, please notify the organizers as soon as possible.

Meals and Refreshments

Lunch is available at the RUB Mensa on workdays from 12h to 14h. Coffee breaks will be served daily.

Leisure-Time Activities

Bochum combines a rich historical heritage with a vibrant contemporary culture, offering visitors a diverse range of leisure activities. Situated in Bochum Süd, the school venue is near an array of natural activities, including botanical gardens, sports facilities, and Kemnader See, known for its watersports and dining options.

- **Activities by the Lake:** Relax in the [Oveney](#) beer garden, enjoy live music at the [Lake Kiosk](#), or rent floating equipment at [Westufer Kemnade](#). The 10km path around Kemnader Lake features separate lanes for pedestrians, cyclists, and rollerbladers.
- **Nightlife at Bermuda3Eck:** Discover the main nightlife area in the center of Bochum with plenty of restaurants and bars.
- **Cultural Landmarks:** Take a guided tour of the Bochum Bergbaumuseum mine or visit the UNESCO-protected Zollverein in Essen.

Contact information and emergency

Do not hesitate to approach organizers for any issues, or write an email to

hadronschooll@rub.de

In case of an emergency, the following contacts and resources are available:

1. **Emergency Organizers' Contact:** +49 157 5263 2673 (Mikhail Mikhasenko)
2. **RUB Control Room:** +49 234 32 23333 ([RUB Emergency Webpage](#))
3. **City of Bochum Emergency Services:** 112 (general), 110 (police)
4. **24/7 Pharmacies:** e.g. [Zentralapotheke](#)

We look forward to seeing you in Bochum!