

The 2025 European School of High-Energy Physics

Benasque, Spain,
15 - 28 October 2025

Welcome!

Martijn Mulders (CERN)

Director, CERN Schools of Physics

On behalf of the international and local organizers of the School

Organizers

(those present at the School this morning)

- For the International Organizing Committee:
 - Martijn Mulders (Director, CERN Schools of Physics)
 - Markus Elsing (Deputy Director, CERN Schools of Physics)
 - Kate Ross (Administrator, CERN Schools of Physics)
- For the Local Organizing Committee:
 - Salvador Marti: Local Director for the 2025 School (IFIC / Valencia)
 - Manuel Asorey: Director of the Centro de Ciencias de Benasque Pedro Pascual (CAPA / Zaragoza)



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European Schools of High-Energy Physics

- Series of schools targeting PhD students in High-Energy Physics dating back to 1960s
 - This year in Benasque, Spain !
- Mission:
 - Latest developments in High-Energy Physics (theory, phenomenology, statistics, Machine Learning and experimental results), taught by world class scientists
 - Aim to foster cultural exchange and networking between participants from different countries and regions
- We hope you can use this opportunity to learn as much as possible in these two weeks and to meet new people

The School Programme

- Lectures, lectures, lectures...!
- Discussion sessions
- Poster session
- Media training & student project
- Excursions
 - 1st Saturday afternoon (→ guided visit + dinner in Aínsa town)
 - Wednesday all day (→ hiking nearby in the Pyrenees)
 - 2nd Saturday: free afternoon

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Programme for today

(see indico web pages for the full programme)

09h00 Welcome

09h10 Field Theory & Standard Model, **Jose Ignacio Illana**

10h40 Coffee break

11h00 QCD, Nigel Glover

12h30 Lunch

+ Free time

15h30 Cosmology, **Diego Blas**

17h00 Coffee break

17h30 Discussion sessions – until 19h00

Only today 19h00: Welcome drink and Dinner here at the center

Lectures

- Lectures last 1h15, plus time for questions
 - Please don't be shy to ask questions, even if they seem basic to you!
 - During the lectures and also at the end
 - Handouts available before each lecture with printout of the presentation, or download them on your tablet before the lecture
 - Make notes on your handouts or your tablet device
 - Take them to the discussion sessions
 - Let us know if you want a printed copy? – we will send a poll to the WhatsApp group to check with you all.

Discussion Groups

- Six discussion groups A, B, C, D, E, F
 - Each student is assigned to a group (<https://indico.cern.ch/event/1573871/attachments/3149756/5593899/ESHEP2025DiscussionGroups.pdf>)
 - Lists are posted downstairs please check what group you are in
 - Discussion Leader stays with the same group for the full two weeks
 - Lecturers are invited to visit the groups
 - Help answer detailed questions on their courses
 - Discussion sessions should be driven by questions from the students
 - Please make note of points that you did not understand in the lectures or other questions that you might have
 - Make use of the lecture handouts in preparing your questions

Discussion Leaders

- Discussion Groups
 - Group A: Jason Aebischer
 - Group B: Maximilian Delto
 - Group C: Javier Fuentes Martin
 - Group D: Clara Murgui Galvez
 - Group E: Victor Martin Lozano
 - Group F: Kay Schönwald
- Markus and I would like to brief the **discussion leaders** after lunch
 - Meet here in the auditorium at 14h00

Please !

- Lectures and discussion sessions
 - Attendance is compulsory
 - Arrive on time
 - Don't use your devices for non-school work
 - Keep your focus on the lectures

Meals and drinks

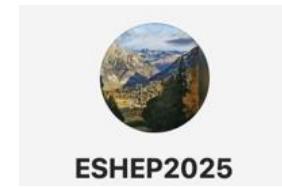
- (Almost) all meals are served in the hotel
 - Breakfast 7:30-9:00 ; Lunch 12:30-13:30 ; Dinner 19:30-20:30
 - Breakfast is buffet style. Lunch and Dinner are a fixed menu, with vegetarian/vegan options
 - Special dietary requirements: if unsure, please ask the waiting staff
- Drinks included with lunch and dinner
 - Water is included
 - Other drinks are not for free --> pay with cash or credit card / phone
 - Order drinks at the table, or at bar near the lobby
 - The bar is open in the evenings until 23:30

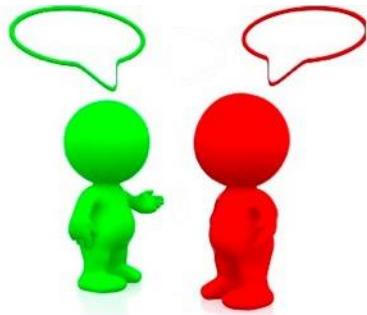
Free time activities

- Several sports and leisure activities available in the hotel, Science centre and outside.
 - Hotel: swimming pool is open from 8:00 until 21:00 – note: you need a swimming cap
 - Hotel: fitness room is open 24/7
 - Spa area with saunas, additional jacuzzis is open 17:00-22:00 (12 EUR)
 - Please feel free to use the Science Centre as quiet place to work, study, for a Zoom meeting, also outside ‘opening’ hours (door code!)
 - Science Centre facilities are ours to use: including table tennis and table football, available in the basement
 - Ask at Science Centre reception for other activities like hiking

Office and announcements

- School's Office
 - **Kate Ross** will be pleased to help in case of questions, problems or requests
 - Our office is located on the ground floor, in the corner next to the sofas
 - There is a school poster on the door of the office
- Announcements
 - From time to time we will make announcements at the end of the lectures
 - We will also use the WhatsApp group so please sign up!





Be Nice

- Be welcoming and respectful to each other and to other guests in the hotel !
([CERN code of conduct](#))
- We hope there won't be any issues but in case you witness or experience inappropriate behaviour or harassment:
 - **Kate** and/or the [CERN Ombud](#) (<https://ombuds.web.cern.ch>) are available as points of contact

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Enjoy the School!