

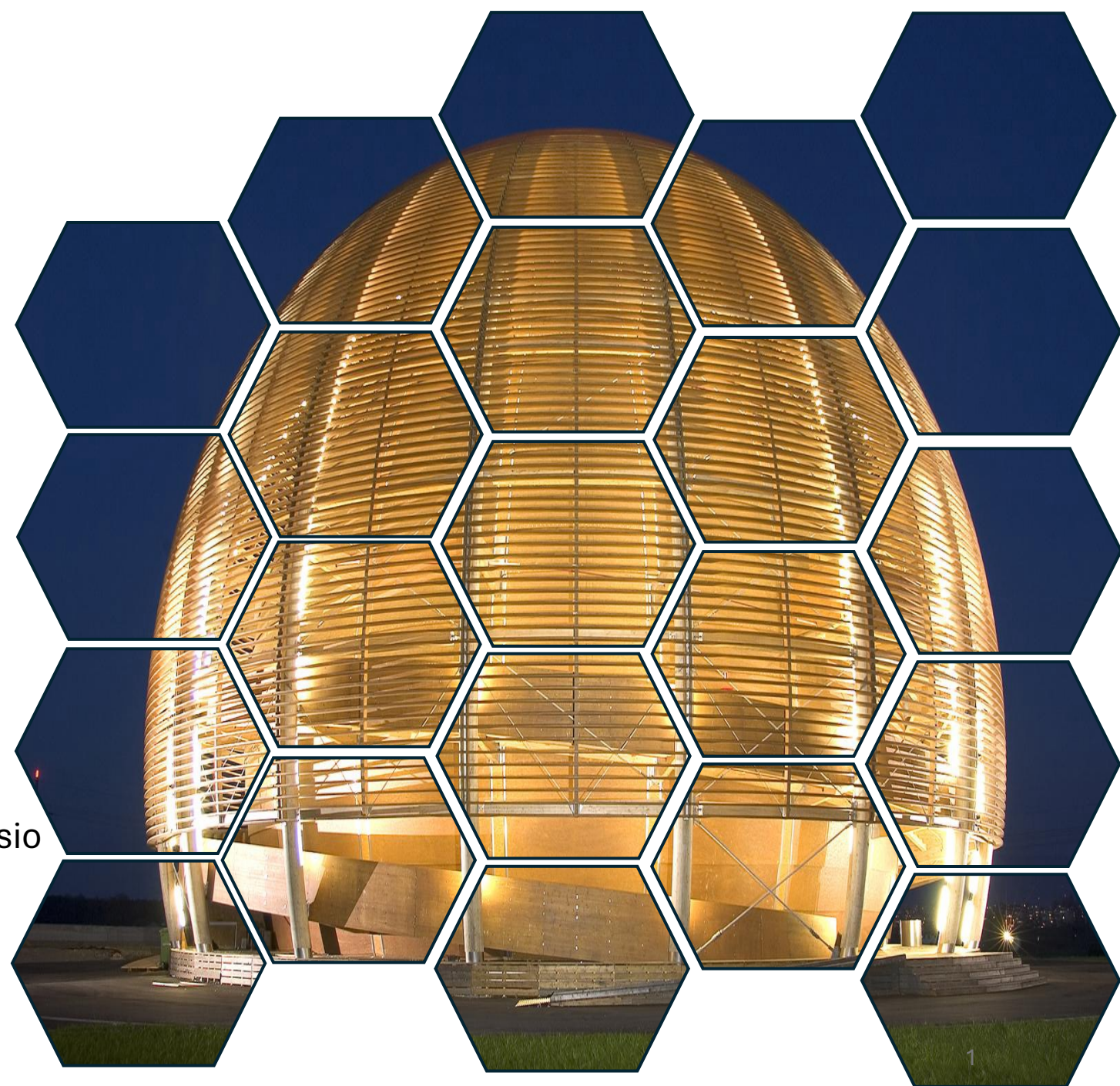


# Future Colliders and the ESPP for Early-Career Researchers at CERN

Nima Zardoshti, Laurent Dufour, Silvia Ferrario Ravasio

CERN  
25/11/2024

25/11/2024



# What is ECFA?

**ECFA**

European Committee for Future Accelerators



- ❖ An organisation aiming to shape and guide the future of physics with high energy accelerators
- ❖ Advisory body to CERN management, CERN council and other organisations
- ❖ All countries + CERN appoint representatives to Plenary ECFA - decide internal administrative issues and approves final reports
- ❖ All countries + CERN appoint one representative to Restricted ECFA – assist and advise ECFA chair and secretary, communication channel with various countries and organisations

# What is ECFA-ECR?

**ECFA**

European Committee for Future Accelerators



- ❖ The objective of the ECFA Early-Career Researchers (ECR) Panel is for its members to discuss all aspects that contribute in a broad sense to the future of the research field of particle physics.
- ❖ The ECR panel has an advisory role to ECFA and reports to ECFA on a regular basis. An annual report of the ECFA ECR Panel is added as a standing item to the agenda of Plenary ECFA meetings.
- ❖ The early career researcher panel has 5 delegates in Plenary ECFA and 1 delegate in Restricted ECFA

# The aim of today's workshop

- ❖ This workshop is aimed for CERN ECRs where the community can touch base with one another and discuss upcoming items and challenges
- ❖ Discuss the European Particle Physics Strategy Update and how it impacts the ECR community
- ❖ Talks from ECRs from a variety of disciplines on ongoing work towards the future direction of the field
- ❖ A special talk on 70 years at CERN
- ❖ Round table discussion to hear back from the community

<b>Welcome &amp; Coffee</b>	
503/1-001 - Council Chamber , CERN	09:55 - 10:10
<b>Introduction</b> <i>Laurent Dufour et al.</i>	
503/1-001 - Council Chamber , CERN	10:10 - 10:20
<b>Update and Outlook of the next European Strategy for Particle Physics (ESPP)</b> <i>Richard Hawkings</i>	
503/1-001 - Council Chamber , CERN	10:20 - 11:00
<b>Physics at the future colliders</b> <i>Jan Eysermans</i>	
503/1-001 - Council Chamber , CERN	11:00 - 11:30
<b>Accelerator technologies</b> <i>Jacqueline Keintzel</i>	
503/1-001 - Council Chamber , CERN	11:30 - 12:00
<b>Lunchbreak</b>	
<b>Lunch provided</b>	
503/1-001 - Council Chamber , CERN	12:00 - 13:00
<b>Historic perspective of 70 years of CERN</b> <i>Luciano Musa</i>	
503/1-001 - Council Chamber , CERN	13:00 - 13:30
<b>Detector technologies for future experiments</b> <i>Florian Maximilian Brunbauer</i>	
503/1-001 - Council Chamber , CERN	13:30 - 14:00
<b>Opportunities in theory</b> <i>Luca Buonocore</i>	
503/1-001 - Council Chamber , CERN	14:00 - 14:30
<b>Coffee break</b>	
503/1-001 - Council Chamber , CERN	14:30 - 14:55
<b>Beyond conventional colliders</b> <i>Kyriacos Skoufaris</i>	
503/1-001 - Council Chamber , CERN	14:55 - 15:25
<b>Fixed-target physics experiments and opportunities</b> <i>Martina Ferrillo</i>	
503/1-001 - Council Chamber , CERN	15:25 - 15:55
<b>Discussion with speakers &amp; panelists</b>	
503/1-001 - Council Chamber , CERN	15:55 - 16:40
<b>Summary &amp; how to get engaged as an ECR</b>	
503/1-001 - Council Chamber , CERN	16:40 - 17:00

# European Particle Physics Strategy Update

- ❖ The aim is to develop a visionary and actionable plan that greatly advances knowledge in fundamental physics through the realisation of **CERN's next flagship project**. This plan should:
  - ❖ Promote and value international collaboration
  - ❖ Ensure Europe's continued leadership in fundamental physics
  - ❖ The Strategy update should identify the *preferred option for the next collider*
  - ❖ It should also outline prioritised *alternative options* to be pursued if the preferred plan proves infeasible or non-competitive.
  - ❖ Additionally, the Strategy should consider *research beyond colliders*, emphasising interdisciplinary and diverse experimental approaches



# European Particle Physics Strategy Update

- ❖ The ECR community plan to submit a white paper covering topics particular to ECRs
- ❖ Work is ongoing on the preparation of the document – to be submitted to EPPSU in March 2025
  - ❖ contribute through discussions in the [mattermost channel](#) and sign up to [eppsu-ecr@cern.ch](mailto:eppsu-ecr@cern.ch)

