

The top of the slide features a blue header with the ECFA logo on the left and a collage of images on the right. The collage includes a meeting room, a globe, and a large particle accelerator structure.

ECFA

European Committee for Future Accelerators

ECFA-UK workshop for the 2026 European Strategy Update: Introduction

Sarah Williams (University of Cambridge)

On behalf of the ECFA-UK plenary ECFA and ECFA-ECR delegates

Plenary ECFA: Daniela Bortoletto, Sinead Farrington, Joel Goldstein,
Haroon Rafique, Aidan Robson, Matthew Wing

UK ECFA-ECR: Julia Allen, Holly Pacey, Patrick Dougan, Atanu Modak

Introduction

- The 2026 ESPPU represents a pivotal moment for High Energy Physics, and aims to make key statements about future priorities for CERN and how it fits into the global landscape.
- There are several ways to provide input to this process ahead of the Open Symposium next June:
 - Contributing to studies (either individually or through projects) submitted for the physics briefing book (deadline 31 March 2025).
 - National inputs, which will be discussed further in the second part of this talk.
 - For ECRs: a dedicated white paper is planned, with a hybrid town-hall meeting scheduled during the [ECFA workshop on Higgs/EW/Top factories](#) in Paris (9-11 October)- more details in backup.

Aims of this workshop

- Bring the experimental and theoretical communities together to discuss the major physics goals of the next decade and the technology challenges (in instrumentation, accelerator R+D and software and computing) needed to realise them.
- Encourage UK contributions to physics studies that will be submitted for the physics briefing book.
- Highlight the UK hopes and capabilities across all areas of HEP before beginning to draft the national input.

A few notes...

- This workshop does not aim to start forming the UK's national input to the ESPPU (which will begin in November) but instead discuss the physics/technology landscape, so please bear this in mind in discussions.
- In particular- we'd like to save detailed discussions on costs (both environmental and financial) and comparisons of projects to the drafting meetings.
- We hope however that the talks and discussions at this workshop will provide an excellent base for us to begin drafting in November!

Format of the meeting

- Divided into 12 strands, each with appointed session chairs from the field and at least one ECFA-UK contact.
 - For theory talks- some have been distributed throughout the relevant sessions.
 - Thanks to the session chairs for their tremendous work preparing for this meeting- we have an excellent programme ahead!
- Detector R&D: Chris Parkes, Daniela Bortoletto*, Joel Goldstein*
 - Accelerator R&D: Phil Burrows, Jim Clarke, Stewart Boogert, Matthew Wing*, Haroon Rafique*
 - Theory cross-cutting the below areas: Michael Spannowsky, Sinead Farrington*
 - e+e-: Guy Wilkinson, Aidan Robson*
 - eh: Uta Klein, Paul Newman, Matthew Wing*
 - 10 TeV pCM colliders: Andy Pilkington, Karol Krizka and Sarah Williams*
 - HL-LHC: Jon Butterworth, Mark Williams, Sinead Farrington*
 - Neutrinos: Kirsty Duffy, Elena Gramellini, Sarah Williams*
 - Direct Dark Matter: Sally Shaw, Jocelyn Monroe, Sarah Williams*
 - Non-collider experiments: Carl Gwilliam, Mark Lancaster, Joel Goldstein*
 - Quantum technologies: Ian Shipsey, Ruben Saakyan, Ed Daw, Sarah Williams*
 - Software+computing: Davide Costanzo, Sam Harper, Joel Goldstein*

=> Thanks all!

Note: there'll be variation in the approaches taken across different strands. In particular some non-collider areas (i.e. neutrinos/dark matter) do not plan new briefing book inputs for the ESPPU, however it is important to understand the current and future landscape and the UK's strengths and capabilities.

Additional notes

- Poster session/reception tonight: please stay and get involved in the discussions.
- Say your name/institute when asking a question- it's a great way to get to know each other.
- Please respect the CERN [code of conduct](#) at all times.
- We have a very packed agenda, so will have to move discussions on at some points. @speakers- please stick to your allocated time.
- I will now provide some information on the current plans for the drafting of the UK's national input to the ESPPU.

2026 European Strategy for Particle Physics Update (ESPPU) - Drafting the UK's national input

Sarah Williams, on behalf of:

Jim Clarke (Director of ASTeC), Sinead Farrington (Director of STFC PPD), Mark Lancaster (UK representative on the European Strategy Group), Ruben Saakyan (Chair of PPAP) and the UK ECFA delegates (Daniela Bortoletto, Sinead Farrington, Joel Goldstein, Haroon Rafique, Aidan Robson, Sarah Williams, Matthew Wing)

Introduction

- Guidelines have now been released by the European Strategy Group (ESG) on the form of the national inputs:
<https://ecfa.web.cern.ch/ecfa-guidelines-collecting-input-european-high-energy-physics-community-2026-update-european> which will be:
 - Accepted at several points in the process.
 - Asked to address a list of key questions.

The following slides aim to summarise the status of plans for the drafting of the UK input- as ever comments and feedback welcome!

When can national input be provided?

- prior to the deadline of 31 March 2025 for the submission of input to the ESPP
- after the March 2025 deadline and by 26 May at the latest, so it can be analysed by the ESG in time for the Open Symposium
- after the Briefing Book has been released, in time for the Strategy Drafting Session from 1-5 December 2025

In the UK, we plan to submit input by the 31st March, with further updates anticipated following additional community discussion.

Plans for UK drafting days

Two national drafting days ahead of the 31st March 2025 to converge on a first draft of the UK input:

- 4th November at Daresbury Laboratory (11am-5.15pm, with coffee from 10.30am)
- 9th January at University College London (times tbc)

There will then be two additional meetings; one following the 31st March deadline but before the 26th May deadline, and a second following the release of the briefing book (probably October 2025).

Scope of drafting days

- These will be open to all, and run in a hybrid manner.
- We particularly encourage ECR participation- this is your future!
- Aiming to do drafting in 'real-time' (where possible), following discussions of suggested sample statements prepared by the drafting team and input provided by projects.
- At the end of each drafting day, drafts/summaries will be circulated for further comment/reflection.
- After the second drafting day, a complete document (page limit 10 pages) will be circulated in February for comments and feedback. This will allow time for a second draft to be circulated to the community early/mid-March to be submitted by the deadline on 31st March.

Additional notes

- We are still working to finalise the plans and agenda for the drafting days- if you have thoughts or suggestions please email Sarah Williams (sarah.louise.Williams@cern.ch), Jim Clarke (jim.clarke@stfc.ac.uk) and Ruben Saakyan (r.saakyan@ucl.ac.uk).
- For the drafting days we plan to solicit input from projects on a set of questions related to physics goals/timelines/costs etc, that will be circulated in the next fortnight, that can be used to compare/contrast projects.

Drafting team

- Role is to facilitate the drafting of the national input in the drafting days.
- Aim for representation across broad range of areas (including ECRs*).
- Where possible members drawn from current PPAP membership or the UK delegates on plenary ECFA.
Otherwise selected after consultation with those leading efforts in the UK.

Aidan Robson
Matthew Wing
Sinead Farrington
Mark Williams
Sarah Williams
Jessica Turner
Henning Flaecher
Mark Lancaster
Ruben Saakyan
Michael Spannowsky
Haroon Rafique
Jim Clarke
Chris Parkes
Joel Goldstein
Davide Costanzo
Daniela Bortoletto
Holly Pacey*
Atanu Modak*
Patrick Dougan*
Julia Allen*

* ECR reps to be augmented with incoming ECFA-ECR panel members upon changeover in January 2025!

Next steps

- We hope to circulate an agenda for registration for the first drafting day shortly after this workshop.
- We hope that many of you will be able to participate in both the 4th November and 9th January drafting days, but plan to provide summaries after the meetings and ways for individuals to submit comments/ feedback ahead of time for those unable to attend.
- Communications will generally be circulated through hi-phi- please ensure you are on this list if you want to receive communications.

Conclusions and thanks

- We hope the next few days will provide lots of fruitful discussion on the future of HEP
- And finally some thanks...
 - to Michael Spannowsky and the IPPP for hosting this workshop (and all the work involved with this).
 - to the session chairs and UK ECFA delegates for their work organizing the workshop.
 - to all the speakers for preparing what we are sure will be an excellent set of talks.
- Will now stop for questions before we break for lunch!



Backup- ECR input to ESPPU

The European Particle Physics Strategy will be [updated](#), with the deadline for input submission by the community being the 31st of March 2025. The ECFA ECR* panel is organising an early-career researcher white paper to submit to the strategy, similar to the ECR response to the last strategy update in 2020 ([arXiv:2002.02837](#)). This process is open to all European early-career researchers[†]. We will discuss our vision for the future of HEP in Europe, focusing on the question of the next collider. The plan towards the white paper is:

- *Hybrid town hall meeting at [3rd ECFA Workshop on Higgs/EW/top factories in Paris, 9-11. October](#)*: In two short sessions ([session 1](#), [session 2](#)) we will discuss and define the topics that should be addressed in the strategy input document. **If you want to participate in person, please [register](#) until Tuesday 24th of September.**
- Following this, dedicated working groups will meet online and draft statements.
- *Hybrid meeting adjacent to the open [Plenary ECFA meeting, 14-15. November at CERN](#)*: We discuss the draft statements from the WGs and consider addressing further topics in the white paper.
- Discussions in the WGs continue. The organisers of the WGs will then compile the full white paper document, which the ECFA ECR panel will endorse.
- We submit the early-career researcher white paper to the European Particle Physics Strategy by 31st of March 2025.

We would appreciate it if many of you could join the discussions (in person in Paris and CERN or via Zoom) and contribute towards the white paper. If you are interested, please

- [Join the `eppsuecr@cern.ch` e-group](#) and [mattermost channel](#) (open to anyone, can “Sign in with your email or organisation” if you don’t have a CERN account)
- [Register for the Paris workshop](#) until the 24th of September if you want to join the discussions in person

Looking forward to discussing and shaping the future of our field,

Jan-Hendrik Arling, Lydia Brenner, Armin Ilg, Marko Pesut for the ECFA ECR Panel (contact us via [eppsuecr-organisers@cern.ch](#))

Apologies if you receive this email multiple times.

*[European Committee for Future Accelerators, Early-Career researchers panel](#)

[†]Non-permanent or <10 years after PhD, studying in or employed in ECFA member states or CERN