

The LHC Early Career Mentoring Programme

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The LHC Early Career Mentoring Programme was established in 2020 and aims to match mentor-mentee pairs who are either affiliated with the same or different LHC experiments, so they can discuss pre-agreed topics in a confidential setting. At the time of the LHCP conference, the programme is now approaching the end of its third round and 50 mentors and 59 mentees have been involved with the programme since its inception. The talk outlines the aims of the programme, its format and provides an overview of the feedback received so far.

*11th Edition of the Large Hadron Collider Physics Conference,
22–26 May 2023,
Belgrade, Serbia*

1. Introduction

The LHC Early Career Mentoring Programme was established in 2020 and aims to match mentor-mentee pairs who are either affiliated with the same or different LHC experiments. The talk outlines the history of the programme and mentor/mentee statistics (Section 2), the format of the programme and of a typical application round (Section 3), and it also summarises feedback received (Section 4). A summary about the programme is also provided in Section 5.

2. History

The LHC Early Career Mentoring Programme [1] was created and voluntarily organised by representatives from the LHC Early Career Scientists Fora [2], which comprises the ATLAS Early Career Scientist Board, the ALICE Junior Representatives, the CMS Young Scientists Committee and the LHCb Early Career Gender and Diversity Office.

The programme began after members of the organisational team met with organisers of the Women in Technology (WIT) [3] and US-CMS mentoring programmes in May 2020 to discuss their experiences of organising their mentoring programmes and to set clear differences in order to avoid overlap. Unlike the WIT mentoring programme, the LHC Early Career Mentoring programme does not focus on female applicants. Additionally, mentors of any career level can apply to the programme, as opposed to the minimum of ten years of experience that the WIT programme required at the time. The acceptance of mentors and mentees is at the discretion of the organisational team and is treated on a case-by-case basis.

Towards the end of 2022, another mentoring programme was created by the CERN Alumni Network. Entitled 'Alumni Mentoring' [4], the programme aims to match mentees affiliated with a CERN experiment to a mentor who used to be affiliated with CERN and now works in industry. The organisers of the WIT Mentoring Programme, the LHC Early Career Mentoring Programme and Alumni mentoring are currently in talks to assess the possibility of a single, merged mentoring programme.

The first round of the LHC Early Career Mentoring Programme began in September 2020 and, at the time of the LHCP conference, it is currently near the end of its third round. Across all three rounds, 50 mentors and 59 mentees have been a part of the programme.

3. Programme Format

The call for applications from mentors and mentees typically opens in Autumn of any given year and remains open for approximately one month. The programme is advertised mainly by email. Additionally, advertisements are also made using Mattermost, experimental newsletters and collaboration-wide meetings, and the CMS Young Scientists Committee social media channels.

Any prospective mentor or mentee affiliated with the ALICE, ATLAS, CMS or LHCb collaborations are eligible to register. Additionally, it is not a requirement for mentees or mentors to be physically

based at CERN or in the same location: the mentorship may be conducted over Zoom or a platform of their choosing.

For the first two rounds (2020-2021 and 2021-2022), an upper limit of 20 mentor-mentee pairs was set while the programme was still in its pilot phase. The limit was lifted for round three. Additionally, for the third round, it was decided that individuals who have been affected by the war in Ukraine can apply to the programme all year round as opposed to only in the Autumn.

Both mentors and mentees register for the programme via Indico and are required to submit a curriculum vitae and cover letter to provide more information about why they wish to be a mentor or mentee in the programme. After the call for applications has closed, organisers perform the matching of mentor-mentee pairs by hand, using information provided in the application forms, curriculum vitae and cover letters submitted. Additionally, a heatmap is generated by running a Python script on the CSV files that are exported from the Indico registrations. It is used to facilitate the identification of the most compatible matches, based on responses submitted in the application forms. A redacted version of the heatmap is shown in Figure 1.

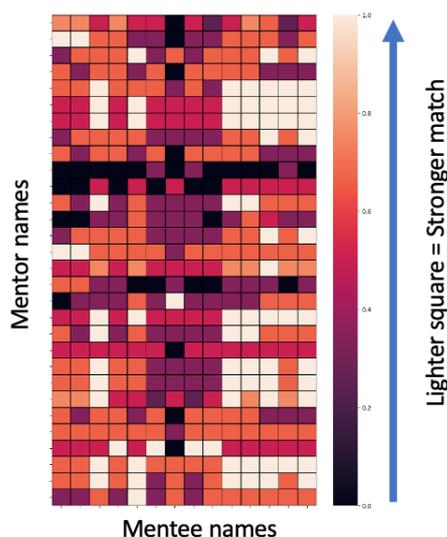


Figure 1: The heatmap used to facilitate the matching of mentor-mentee pairs.

As a general rule, organisers do not match mentors and mentees who are either affiliated with the same institution or who work together in any other capacity. This is so that either party can speak freely without the fear of any repercussions arising as a result of the information shared in their correspondence.

After the matching is complete, mentors and mentees are informed of the individuals they have been paired with and they are also provided with the opportunity to either accept or reject the match. Mentors may be paired with multiple mentees. The mentor and mentee(s) are then encouraged to contact each other to organise their first meeting. After their first meeting, they are encouraged to complete an agreement form to indicate the topics that they have agreed to discuss and the time investment they are willing to devote to the mentorship. They are encouraged to send a signed copy of the form to the programme organisers. This is to enable expectation setting between the mentor and mentee and also ensures that both the mentor and mentee are aware that anything they discuss should be kept confidential.

Mentors and mentees are provided with the flexibility to organise their own meetings. Some time into an application round, mentors and mentees are invited to attend ‘kick-off’ meetings. These are

group meetings, held separately for the mentee and mentor cohorts, that provide the opportunity for mentees and mentors to openly discuss initial feedback of the programme with the organisers in attendance, and to brainstorm ideas for topics to discuss with their mentor/mentee.

The mentorship continues until the end of August, which marks the end of a formal round of the programme. Mentor-mentee pairs may then continue their mentorship informally if they wish to do so.

4. Feedback

Verbal feedback has been obtained during the ‘kick-off’ meetings, held separately for mentors and mentees. Anonymous feedback surveys are sent to mentors and mentees at the end of each round in August via Indico. An overview of the feedback gathered so far is presented in this section.

A near-unanimous satisfaction rate has been observed so far in the programme. Multiple respondents of the feedback surveys reported that they enjoyed the flexibility and transparency that the programme offers. However in each of the first two rounds, there was a mentee who reported that their mentors stopped responding to them. As a result, the two affected mentees were offered places onto the second and third rounds, respectively, and reported that they were satisfied with their new matches.

Additionally, it has been noted in discussions among members of the programme’s organisational team that the majority of mentors and mentees are either affiliated with or are from European countries. While there was a noticeable improvement in the third round, us organisers believe that it would be of benefit to use a more targeted publicising strategy to achieve more diverse mentor and mentee cohorts.

5. Summary

In summary, the LHC Early Career Mentoring programme was established in 2020 after discussions took place between organisers of the programme, who are volunteers from the LHC Early Career Scientists Fora, and that of the Women in Technology and US-CMS mentoring programmes in order to avoid overlap in the scopes of the programmes. Since then, the programme has had three rounds, with an exception made in round 3 such that individuals affected by the war in Ukraine can apply to the programme all year round as opposed to only in the Autumn. There have been 50 mentors and 59 mentees signed up to the programme in total and a near unanimous satisfaction rate has been observed from feedback surveys. In future, the organisers aim to use a more focused advertising strategy to help improve the level of diversity among mentors and mentees.

References

- [1] The LHC Early Career Mentoring Programme. Available: <https://lhc-mentoring.web.cern.ch/>
- [2] Gudnadottir, O. (2023). *Report from the LHC Early Career Scientist Fora*. 11th edition of the Large Hadron Collider Physics Conference. Belgrade, Serbia. Available: <https://indico.cern.ch/event/1198609/contributions/5325944/attachments/2650595/4589658/ReportFromLHCECSFora.pdf>
- [3] Women in Technology Mentoring Programme. Available: <https://wit-hub.web.cern.ch/mentoring/>
- [4] The CERN Alumni Network. Available: <https://alumni.cern/mentorships>