

Guidelines for the LHCb-UK PhD prize

LHCb-UK steering board

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1 Introduction

This document outlines the guidelines for an annual LHCb-UK prize that will be awarded to the PhD student with the “best” overall contribution to LHCb.¹ The motivation for the creation of this prize is to draw attention to our top students to give them some additional publicity that may assist in differentiating them from other applicants in a highly competitive job market. These guidelines set out a pragmatic solution to achieving this in a clear and transparent way.

2 Eligibility

A student will be eligible for the prize under the following conditions:

1. They have successfully defended their thesis during the previous academic year (1st October – 30th September). They do not need to have graduated.
2. The thesis documents their contribution towards the LHCb experiment or its upgrade, for example in physics analysis, hardware or software.
3. Their LHCb-UK institute representative has nominated them for the prize by sending an email to the chair of the selection committee (defined below) along with the following documents.
 - (a) A link to an electronic form of the thesis.
 - (b) A two-page CV of the student, including a list of their direct contributions to LHCb.
4. It is expected, although not required, that the following documents are also sent separately by their authors to the chair of the selection committee.
 - (a) A letter of recommendation from the current or previous convenor (or deputy) of the physics working group or detector project where most of the work has been carried out. This person must not be from the same institute as the student. It should include a statement such as “I am familiar with the work of x students in the working group over the last y years, and would rate the contribution of this student as z th”. In case a student has made significant contributions to both physics analysis and a detector project, or another service to the collaboration, letters from both relevant conveners will be accepted.
 - (b) A letter of recommendation from the student’s external examiner.
5. Each institute can nominate at most one student each year. It is expected that the student’s supervisor will be involved in making the case for the student to the institute, but a letter of recommendation from the supervisor is not expected and will not be considered by the selection committee.

¹Prior to Nov. 2019, this prize was sometimes referred to as the “LHCb-UK student prize” and sometimes as the “LHCb-UK thesis prize.” The name was changed with the aim of clarifying that the prize is for the entirety of work on LHCb carried out during a student’s PhD studies (see Sec. 4.1).

3 Selection committee

The selection committee will be composed of the LHCb-UK spokesperson, physics coordinator and two other LHCb-UK academics. To ensure balance, the diversity of the LHCb community will be reflected in the panel. The spokesperson will chair the committee.

4 Selection process

Once all documents have been received, the committee will draw up a short-list of not more than three candidates. The committee will be required to meet at least once (via video-conference or in person) to decide on the short-list. If the short-list contains a candidate from the same institute as represented on the committee, that member will be replaced by someone from a third institute for the final decision making. The chair person will appoint a suitable representative, including a new chair person, if necessary.

The members of the committee will read the short-listed theses and have a final meeting (again, via video-conference or in person) to decide upon the winner by means of a vote. In the event that the decision is tied, the chair will have the casting vote. Feedback will be provided to any candidates if they request it.

4.1 Selection criteria

The committee should decide on the short-list and eventual winner based upon the **excellence of the student's contributions to LHCb and the quality of description of these activities in their thesis**. The thesis should provide a concise yet thorough description of their research, placing it in context within the field, motivating where they have contributed new results and concluding with an outlook to the future. Descriptions in the thesis should be understandable to a particle physicist who is not necessarily an expert in the sub-field being discussed; detailed technical discussions may be given in Appendices. Table and figure captions should be correctly formatted and complete. Abbreviations must be defined where needed and references should be properly formatted. In addition to the content of the thesis, the committee will consider contributions such as:

- LHCb-internal notes, analysis notes and published papers.
- Positions of responsibility in physics working groups (i.e. sub-group convenor, liaison, etc).
- Detector development & commissioning.
- LHCb maintenance & operations activities.
- LHCb conference talks delivered.

Evidence for these contributions should be clear from the CV and recommendation letters.

5 Timeline

- All nominations and relevant documents should be sent to the committee chair by **15th October** each year. The chair will ensure these are distributed to the committee.
- The committee should meet no later than **15th November** to decide on the short-list.

- The committee should meet no later than **15th December** to choose the successful student from the short-list.
- Presentation of the award at the annual LHCb-UK meeting in **January**.

6 Award details

The winning student will be invited to attend the LHCb-UK annual meeting to present their work and be awarded with a suitably designed certificate.