

FACULTY OF SCIENCE

COBRA REPORT

Study programme: Master of Physics

Drawn up on: December 1st, 2019

KU Leuven uses the <u>COBRA method</u> to work on the quality of its study programmes. In this report the programme committee reports every four years on the quality of its programme(s) and describes the identified strengths and planned actions of its programme Master of Physics.

Strengths of the study programme

- The master programme has a logical and flexible structure that offers a good balance between specialized and broadening knowledge. Next to the master's thesis, the programme contains three clear groups of courses: the first group consists of advanced, general physics courses, the second contains highly specialized physics courses within the domain of the master's thesis, the courses in the third group are oriented towards the work field in an either society related or research related way.
- The master programme is strongly research based. The specialization profiles (Condensed Matter Physics, Nuclear Physics and Theoretical Physics) are strongly related to and integrated within the research lines of the Department of Physics and Astronomy. Moreover, the educational methods fully embrace research skills and approaches (presentations, literature study, paper discussions...).
- The thesis consists of an original research work by the student. It proves to be a powerful training in becoming a truly independent researcher.
- All students are given an inside view into other international research labs and large-scale research facilities through several lab visits during the master programme.
- Through several info sessions, a clear programme guide, and low-barrier personal advice from study advisors and programme director, students are well supported in planning their studies.

Planned actions

- The programme will continue to improve the coherence and connection between the different related courses in the programme (learning paths) by organizing discussions among the respective didactic teams.
- The programme aims to further intensify the integration of its own research topics and state-ofthe-art experiments within the different master courses, e.g. by including more demo's and lab visits.
- In order to stimulate the master students to participate more in internships and in international Erasmus exchange programmes, the programme wishes to optimize the communication on these possibilities and set up pre-defined exchange packages of courses that can be taken up by students during their exchange abroad.

This COBRA report is a result of the past four-year COBRA cycle (2015-2019). Each study programme that participated in the COBRA cycle has drawn up this document, which specifies the strengths and planned actions of the study programme. These strengths and actions result from the dialogue between the programme and its stakeholders (primary actors, alumni, professional field and international experts from the discipline). This report aims to give a comprehensive indication of the study programme's realised quality. The COBRA report will be made available in the programme guide, so it will be accessible to the public.



More information on COBRA: <u>https://www.kuleuven.be/english/education/quality/cobra-english/quality-assurance-method</u> More information on the quality of education: <u>https://www.kuleuven.be/english/education/quality</u> KU Leuven educational terminology: <u>https://www.kuleuven.be/english/education/educational-glossary/educational-glossary</u>