

Module Description

28-M-MMTP Master's Thesis

Faculty of Physics

Version dated Feb 22, 2026

This module guide reflects the current state and is subject to change. Up-to-date information and the latest version of this document can be found online via the page

<https://ekvv.uni-bielefeld.de/sinfo/publ/modul/38215001>

The current and valid provisions in the module guide are binding and further specify the subject-related regulations (German "FsB") published in the Official Announcements of Bielefeld University.

28-M-MMTP Master's Thesis

Faculty

Faculty of Physics

Person responsible for module

Prof. Dr. Gernot Akemann

Prof. Dr. Michael Baake

Regular cycle (beginning)

Every semester

Credit points

30 Credit points

Competencies

Non-official translation of the module descriptions. Only the German version is legally binding.

Students are able to carry out scientific work independently. In addition, they have acquired qualifications such as project management, teamwork and the presentation of scientific results.

Content of teaching

In the master's thesis, a current topic from the field of mathematical or theoretical physics or mathematics is worked on independently under the guidance of the first and second supervisor of the thesis. The topic takes into account the interdisciplinary aspects of the degree programme in that the thesis should have a component from the other subject. The topic should be at a high scientific level and is usually set in such a way that the result is likely to be included in a scientific publication.

Recommended previous knowledge

—

Necessary requirements

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Explanation regarding the elements of the module

Module structure: 1 bPr¹

Examinations

Allocated examiner	Type	Weighting	Workload	LP ²
<p>Person responsible for module is examiner</p> <p><i>The Master's thesis is a written paper, usually 40-60 pages in length. It is issued and supervised by an authorised examiner from the Faculty of Mathematics or the Faculty of Physics. Upon registration of the thesis, in addition to the supervisor, a staff member from the other faculty is also appointed, who usually prepares the second opinion. Group work is excluded. The processing time is 6 months. The topic and assignment must be such that it can be completed within the planned workload of 30 CP (900 hours). The thesis must be submitted electronically as a PDF document to the examination office of the Faculty of Physics by the deadline. Further regulations on the Master's thesis can be found in the Master's examination regulations. All doctoral staff members of the Faculty of Mathematics or the Faculty of Physics can be supervisors. In addition to the signature of the intended supervisor, the registration of the Master's thesis must also include the consent of the head of the working group. The second authorised examiner must hold a doctorate. After submission of the thesis, the second reviewer will be finalised in accordance with § 15 (2) of the examination regulations and § 14 of the Master's examination regulations.</i></p>	Masterarbeit	1	900h	30

Legend

- 1 The module structure displays the required number of study requirements and examinations.
 - 2 LP is the short form for credit points.
 - 3 The figures in this column are the specialist semesters in which it is recommended to start the module. Depending on the individual study schedule, entirely different courses of study are possible and advisable.
 - 4 Explanations on mandatory option: "Obligation" means: This module is mandatory for the course of the studies; "Optional obligation" means: This module belongs to a number of modules available for selection under certain circumstances. This is more precisely regulated by the "Subject-related regulations" (see navigation).
 - 5 Workload (contact time + self-study)
- SoSe** Summer semester
- WiSe** Winter semester
- SL** study requirement
- Pr** Examination
- bPr** Number of examinations with grades
- uPr** Number of examinations without grades