## Module description

| Module title  |  |                                      |                     |                   | Abbreviation |
|---|--|--------------------------------------|---------------------|-------------------|--------------|
| Methods of Observational Astronomy       11-ASM-161-m01   |  |                                      |                     |                   |              |
| Module coordinator  |  |                                      |                     | Module offered by |              |
| Managing Director of the Institute of Theoretical Physics Faculty of Physics and Astronomy and Astrophysics   |  |                                      |                     |                   |              |
| ECTS Method of grading  |  | Only after succ. compl. of module(s) |                     |                   |              |
| 6 numerical grade   |  |                                      |                     |                   |              |
| Duration  |  | Module level                         | Other prerequisites |                   |              |
| 1 semester graduate   |  | graduate                             |                     |                   |              |
| Contents  |  |                                      |                     |                   |              |
| Methods of observational astronomy across the electromagnetic spectrum. Evaluation of observational data from radio, optical, X-ray and gamma-ray telescopes.   |  |                                      |                     |                   |              |
| Intended learning outcomes  |  |                                      |                     |                   |              |
| Overview of the methods used in observational astronomy in various parts of the electromagnetic spectrum (ra-<br>dio, optical, X-ray and gamma-ray energies). Knowledge of principles and applications of these methods and<br>ability to conduct astronomical observations.  |  |                                      |                     |                   |              |
| <b>Courses</b> (type, number of weekly contact hours, language — if other than German)  |  |                                      |                     |                   |              |
| V (3) + R (1)<br>Module taught in: German or English  |  |                                      |                     |                   |              |
| module is creditable for bonus)<br>written examination (approx. 90 to 120 minutes) or oral examination of one candidate each (approx. 30 minutes)<br>or oral examination in groups (groups of 2, approx. 30 minutes per candidate) or project report (approx. 8 to 10<br>pages) or presentation/talk (approx. 30 minutes).<br>If a written examination was chosen as method of assessment, this may be changed and assessment may in-   |  |                                      |                     |                   |              |
| stead take the form of an oral examination of one candidate each or an oral examination in groups. If the method of assessment is changed, the lecturer must inform students about this by four weeks prior to the original examination date at the latest.   |  |                                      |                     |                   |              |
| Assessment offered: In the semester in which the course is offered and in the subsequent semester Language of assessment: German and/or English   |  |                                      |                     |                   |              |
| Allocation of places  |  |                                      |                     |                   |              |
|   |  |                                      |                     |                   |              |
| Additional information  |  |                                      |                     |                   |              |
| Referred to in LPO I (examination regulations for teaching-degree programmes)   |  |                                      |                     |                   |              |
| Module appears in   |  |                                      |                     |                   |              |
| Master's degree (1 major) Mathematics (2016)<br>Master's degree (1 major) Physics (2016)<br>Master's degree (1 major) Nanostructure Technology (2016)   |  |                                      |                     |                   |              |
| Master's degree (1 major) Computational Mathematics (2016)<br>Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)<br>Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)<br>Master's degree (1 major) Computational Mathematics (2019)<br>Master's degree (1 major) Mathematics (2019)<br>Master's degree (1 major) Nanostructure Technology (2020)<br>Master's degree (1 major) Physics (2020) |  |                                      |                     |                   |              |
| Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)  |  |                                      |                     |                   |              |

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Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2020)

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