**Module title**

Theoretical Physics 3 (Theoretical Quantum Mechanics)

**Abbreviation**

11-T3-072-m01

**Module coordinator**

Managing Director of the Institute of Theoretical Physics and Astrophysics

**Module offered by**

Faculty of Physics and Astronomy

<table>
<thead>
<tr>
<th>ECTS</th>
<th>Method of grading</th>
<th>Only after succ. compl. of module(s)</th>
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<tbody>
<tr>
<td>8</td>
<td>numerical grade</td>
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**Duration**

1 semester

**Module level**

undergraduate

**Other prerequisites**

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**Contents**

Limits of classical physics, Schrödinger equation, mathematical foundations of quantum mechanics, harmonic oscillator, angular momentum and spin, hydrogen atom, many-particle systems.

**Intended learning outcomes**

The students have knowledge of the principles of quantum mechanics and the required calculation methods.

**Courses**

V + Ü (no information on SWS (weekly contact hours) and course language available)

**Method of assessment**

written examination (approx. 120 minutes)

**Allocation of places**

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**Additional information**

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**Referred to in LPO I**

(examination regulations for teaching-degree programmes)

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**Module appears in**

- Bachelor’ degree (1 major) Mathematics (2008)
- Bachelor’ degree (1 major) Mathematics (2007)
- Bachelor’ degree (1 major) Physics (2007)
- Bachelor’ degree (1 major) Physics (2009)
- Bachelor’ degree (1 major) Physics (2008)
- Bachelor’ degree (1 major) Nanostructure Technology (2008)
- Bachelor’ degree (1 major) Nanostructure Technology (2007)
- Bachelor’ degree (1 major) Computational Mathematics (2009)
- Bachelor’s degree (1 major, 1 minor) Physics (Minor, 2008)