



Doctoral School of Physics

- short presentation -

The Doctoral School of Physics is one of the oldest doctoral schools in Babes-Bolyai University, whose purpose is to conduct high level PhD studies in the field of physics and related interdisciplinary areas. Our 3 years PhD program is addressed to MSc graduate students with solid scientific background in physics and natural sciences and strong motivation in performing research activities. The doctoral program is research-oriented, being committed to offer in depth training through research activities in state-of-the-art facilities as to allow PhD students to achieve innovative results that conclude with a doctoral thesis, publications in scientific journal and internationally recognized diploma and competitiveness in research.

Immediately after enrollment, under the guidance of their supervisors, doctoral students engage a research project and start to work on their chosen topic for the next 3 years or even more, according with scheduled plan of activities. In the first year, students are required to attend a number of 4 doctoral courses and complete the corresponding exams. At the end of each year, the students must submit a report on the progress on their research. In order to get the degree of Doctor in Physics, the students must have at least two papers published (one of publication may be replaced by an oral presentation at an international conference). The impact factor of publications should be higher than 0.5.

The research topics offered to PhD students reflect both the traditional and recent developments of the Faculty of Physics, i.e. from physics of solid state to biomolecular physics and theoretical physics, including several deep specializations in nanomaterials, biomaterials, magnetism, spintronics, plasmonics, optical spectroscopy and magnetic resonance, molecular, atomic and nuclear interactions as well computational and interdisciplinary studies focused on complex societal phenomena, medical physics and interface between physics, chemistry and life sciences. The research at the Doctoral School is done in the state-of-the-art facilities offered by [Ioan Ursu Institute](#) at Faculty of Physics, [Institute for Interdisciplinary Research on BioNanoScience](#) and laboratories belonging to other faculties in Babes-Bolyai University as well laboratories located in partner research institutes and universities in Cluj-Napoca or abroad.