

PHD STUDENT POSITION

Department of Physics

Faculty of Science and Mathematics, University of Niš, Serbia

The Position

If you are interested in exploring the **fundamental phenomena of quantum physics** and **biological physics/chemistry**, have a strong background in quantum mechanics, **apply now!**

The candidate will be a **student of the academic doctoral studies** working on scientific research toward the dissertation at the Department of Physics, Faculty of Science and Mathematics, University of Niš, Serbia.

No tuition fees are charged for doctoral study. However, when you apply for a study visa in Serbia, the authorities may ask to see **whether you have sufficient funds to cover the cost of living** – approximately 4,000 euros a year.

Details of the **curriculum** can be found at [for the English version please contact the email address below] http://wpresspmf.pmf.ni.ac.rs/?page_id=1737.

The work

The goal of the research is to lay down the **theoretical basis** for introducing the quantum measurement process on the level of the famous **protein-recognition** problem. To some extent, this process is a reminiscent of the formal description of the measurement process in physics. Bearing in mind that the classical-physics models are fairly useless, it is the leading hypothesis that the quantum measurement may base the protein recognition in the realistic situations. Therefore, the **main task of the thesis** consists in developing the methods (with the aid of the computer numeric) of checking to what extent and reliability the standard models of quantum measurement (also used in quantum decoherence) might be useful.

Required qualifications and competencies

Our ideal candidate has a **strong background in foundations of quantum mechanics and preferably the basic knowledge in the protein-recognition(folding) science**, and has the academic master degree in physics or related fields.

How to apply

Expressions of interest or applications with a short CV should be sent to Jasmina Jeknić-Dugić at jjeknic@pmf.ni.ac.rs .