

Postdoc position: Ab-initio spintronics

Institute of Physics of the Czech Academy of Sciences

A postdoc position is open in the Department of Spintronics and Nanoelectronics at the Institute of Physics of the Czech Academy of Science in Prague, Czech Republic. The work will focus on theoretical study of spintronics phenomena, mainly in antiferromagnetic materials and other materials with complex magnetic structure.

Antiferromagnets have attracted a considerable attention in the spintronics community in the recent years because they are largely unexplored yet have some intriguing and potentially useful properties. Our department has been at the forefront of experimental and theoretical antiferromagnetic spintronics research. In this project, we will mainly focus on exploring different ways of controlling or detecting the magnetic orders by electrical means, since this is the key for possible applications. The work will mainly involve quantum transport calculations and to lesser extent DFT calculations for calculation of ground state properties.

A strong background in theoretical condensed matter physics is necessary. An experience with DFT calculations or transport calculations is advantageous, but not strictly necessary. Good programming skills are also an advantage since we develop several computer codes in our group.

The position is offered for one year initially but can be possibly extended. You can start anytime.

For more information about our group, visit our website at <https://www.spintronics.fzu.cz>.

If you have any questions send an email to zeleznyj@fzu.cz. If you want to apply, please send a CV and two recommendation letters.