

FACULTY OF MATHEMATICS AND PHYSICS Charles University

Open junior researcher position - ultrafast magnetization dynamics theory

at Charles University, Prague:

The position focuses on solving open questions related to photoexcitations in solids and the induced magnetization dynamics on femtosecond timescale: opto-magnetic effects as well as the analogous phono-magnetic effects facilitated due to strong coupling with phononic modes.

The approach will be based on state-of-the-art theoretical and computational methods employing large-scale HPC simulations.

We thus expect experience with **some of the following theory topics/methods**: **description of interaction between light and matter, magnetization dynamics methods, ab initio calculations of solids.** Experience should preferably be proven by existing publications.

The funding is available for two years with possible extension up to five years

Salary: cca. 2500 EUR/month paid in CZK (cca. 2000 EUR after taxation) + benefits.

Qualification requirements: a researcher with Ph.D. in physics or related fields, obtained not earlier than 7 years before Oct 2023 (this may be extended by maternity or parental leave, long-term illness, taking care of a family member for more than 90 days, and military service). An appropriate publishing activity is required.

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We especially invite women to apply.

Electronic applications, i.e. a scan of the signed cover letter should be accompanied by

•curriculum vitae,

•list of publications,

•research statement,

•a copy of PhD diploma