



CHARLES UNIVERSITY

Primus Research Programme

Job advertisement:

The Faculty of Mathematics and Physics of the Charles University, Prague opens **two Postdoc positions** within the Primus Research Programme: "*The interaction of fluids and solids*" lead by Sebastian Schwarzacher and Barbora Benešová.

Project description: Fluid solid interaction happens in many everyday instances. For example in the trachea where the air-flow inside the windpipe interacts with the cartilage surrounding it. The project aims to systematically develop an analysis for the related theory of partial differential equations. The scientific challenge is sub-summarized in the free interface between the solid and the fluid—the variable domain. Our objective is to advance the available mathematical theory in fluid-structure interaction towards the realistic case where both fluid and solid part are three-dimensional objects.

Job description: The ideal candidate will have a strong background in the analysis for non-linear PDEs. He is expected to strengthen the team and, in particular, to apply/develop analysis or numerics to fluid-structure problems studied within the project.

Both positions are for 2 years with the possible extension by another year. The start of the position is earliest in January 2019 and latest in Mai 2019. The successful candidate will be hired by the Faculty of Mathematics and Physics and receive a salary of 54000 CZK (around 2100 €) per month.

In case of interest please send your application until **16.11.2018** by email to **schwarz@karlin.mff.cuni.cz**. The application should be a single PDF file and include a CV, a research statement and the copy of the PhD diploma or if not available the master diploma. Two letters of recommendation should be sent separately to the e-mail address given above.

Contact: Sebastian Schwarzacher, Department of Mathematical Analysis, Faculty of Mathematics and Physics, Charles University, Sokolovská 83, 186 75 Prague.

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