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EUROPEAN UNION



MINISTRY OF EDUCATION,  
YOUTH AND SPORTS



INVESTMENTS IN EDUCATION DEVELOPMENT

Czech Technical University in Prague

Faculty of Nuclear Science and Physical Engineering

Project „ Support of inter-sectoral mobility and quality enhancement of research teams at  
Czech Technical University in Prague “

CZ.1.07/2.3.00/30.0034

## Six postdoctoral positions in Mathematical Physics

Applications are invited for postdoctoral positions on the research subjects at the Department of Physics, Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University in Prague. The proposed research topics are:

- Quantum Communication
- Quantum Walks

Both topics are supervised by mentor prof. Ing. Igor Jex, DrSc.  
( <http://physics.fjfi.cvut.cz/jex/>).

- Study of Quantum Waveguides and Quantum Layers
- Study of the Dynamics of Quantum Graphs
- Study of the spectral properties of quantum graphs

Three topics are supervised by mentor prof. Ing. Pavel Exner, DrSc.  
( <http://gemma.ujf.cas.cz/~exner/> ) .

- Mathematical Methods for the Solution of the Classical and Quantum Processes

The topic is supervised by mentor ass. prof. Ing. Goce Chadzitaskos, CSc.  
(<http://www.fjfi.cvut.cz/users/chadzitaskos.htm>).

The advertised positions are supported by the EU Operational Programme "Education for Competitiveness". The successful candidates will be employed by the department's branch in Děčín, working in close collaboration with her/his mentors based in Prague. The positions are for a period up to two years with salary of 56.000,- CZK/month.

Candidates are supposed to have

- recent Ph.D. degree in mathematical physics on university in the Czech Republic or equivalent degree from elsewhere (recognized by the Czech law No. 111/1998 Sb) completed after March 29, 2008, incl.
- sufficient knowledge of English language,
- at least one publication in peer reviewed journal listed in WoS database.

The application must contain

- one-page curriculum vitae with list of publications,
- motivation letter indicating her/his research interests and their connection to proposed research topics,
- letter of recommendation from thesis supervisor including her/his e-mail contact,
- proof of satisfactory knowledge of English language

All required documents shall be provided in Czech or English. The applicant may also arrange for up to two additional letters of support submitted on her/his behalf to the address below.

The deadline for the submission of applications is January 2, 2013. Selection of the successful candidates will take place in January 2013. Essential selection criteria are: number and quality of publications of the applicant, compatibility of her/his research interests with the interests of the presumptive collaborators and the general quality of the application, especially of the motivation letter. The actual start of each position is negotiable, preferably April 2013, completion of the project activities is June 30, 2015.

The contact person is Ms. Zdeňka Císlarová, MSc. Applications are to be sent by e-mail to [zdenka.cislerova@fjfi.cvut.cz](mailto:zdenka.cislerova@fjfi.cvut.cz) and simultaneously by ordinary mail to

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