

Director
of **IT4Innovations National Supercomputing Center**
VSB - Technical University of Ostrava
announces a selection procedure for a post of
Research Assistant 1 in Applied Mathematics/Theoretical Physics
for Advances Data Analysis and Simulations Laboratory

The position is suitable for both women and men.

IT4Innovations National Supercomputing Center is a leading research, development, and innovation centre active in the fields of High-Performance Computing (HPC), Data Analytics (HPDA), Artificial Intelligence (AI), and Quantum Computing (QC) and their applications. We have strong international links and employ more than 180 scientific, technical, and administrative staff. At present, IT4Innovations is running two supercomputers: Karolina (15.7 PFlop/s, installed in the summer of 2021), Barbora (849 TFlop/s, installed in the autumn of 2019), and is a member of the consortium operating LUMI, one of Europe's most powerful supercomputers. The VLQ quantum computer was installed at IT4Innovations in 2025. For more details, see www.it4i.eu.

Required expertise:

Mathematical Modelling and Simulations
Theoretical Physics

Activity description:

- work in a research team focusing on applications of mathematics in the field of advanced data analysis and simulations, theory of relativity, cosmology,
- optimization of training and inference pipelines for AI models and contributing to the preparation of national or international projects,
- conducting research and publishing under the guidance of excellent researchers and senior researchers,
- contributing to the cooperation with partner institutions.

Full time equivalent:	0,5
Type of job contract:	fixed-term employment
Expected start of employment:	1. 10. 2025 or as agreed
Number of position:	1

We require:

- minimum MSc. in applied mathematics, theoretical physics, engineering or related disciplines,
- programming skills, knowledge of numerical methods used for solving partial differential equations, experience in numerical simulations and solving PDE's with numerical methods documented by at least 2 publications, sound knowledge on how to develop innovative mathematical models, excellence in qualitative analysis of the model to demonstrate its mathematical consistency,
- active knowledge of the English language,
- ability to learn new technologies and to work in a dynamic research environment.

We offer:

- work in a promising organization,
- salary evaluation according to the candidate's experience,
- modern laboratory and classroom facilities,
- opportunity to participate in excellent research,
- possibility of further education,
- 6 weeks of holidays,
- flexible working hours,
- university kindergarten,
- contribution to pension plan,
- company catering in the canteen,
- MultiSport card,
- other employee benefits according to the employer's offer.

Your personal data will be processed to the extent necessary for the implementation of the selection procedure in accordance with EU Regulation 2016/679.

<https://www.vsb.cz/export/sites/vsb/en/.content/files/Informace-pro-uchazece-o-zamestnani-AJ.pdf>

Send applications accompanied by a CV and motivation letter to the email address:

petra.brozova@vsb.cz **until 15. 9. 2025.**

In the subject of the email, please state "Open Call for the position of the Research assistant 1 in Applied Mathematics/Theoretical Physics for the Advanced Data Analysis and Simulations Laboratory".