

Research Fellow/Postdoc positions for the project

Interactions and causality in complex systems

Institute of Computer Science CAS in Prague

A new project funded by the *Praemium Academiae* awarded to Milan Paluš (<http://www.cs.cas.cz/mp/>) by the Czech Academy of Sciences for the period 2020-2025

is open for applications for positions of research fellows or postdoctoral researchers. PhD student positions can also be considered.

The project is oriented to study interactions and causality in nonlinear, multiscale complex systems with extreme events. The primary application fields will be the **Earth climate, magnetosphere/ionosphere (space weather)** and the **human brain**.

Conditions:

- The initial contract will be for one year with possible extension during the project duration.
- The positions are available immediately or upon agreement.
- Applications will be reviewed until March 30, 2020, or until the positions are filled.
- This is a full-time fixed term contract appointment.
- Monthly gross salary: 37000 - 55000 CZK based on qualifications and experience. [Cost Of Living Comparison](https://www.numbeo.com/cost-of-living/comparison.jsp) (<https://www.numbeo.com/cost-of-living/comparison.jsp>)
- Bonuses and travel funding for conferences and research stays depending on performance.
- No teaching duties.
- Applicants should:
 1. Hold a PhD (PhD. student/research assistant positions available as well, contact M. Paluš) in computer science, mathematical and physical sciences, geosciences or neuroscience and proven experience at least in one of the following:
 - Estimation of information-theoretic functionals, esp. in **causality** analysis
 - Extreme events**
 - Climate modelling and climate data processing (e.g. NetCDF data format)**
 - Magnetosphere/ionosphere (space weather)**
 - Brain data processing and modelling**
 - Machine learning, in particular, physics-informed machine learning**
 2. Have strong data analysis, statistical, mathematical modelling and/or machine learning skills with practical programming experience
 3. Be fluent in English

The applications should be sent to ics@cs.cas.cz and should contain:

Curriculum Vitae. Two letters of recommendation. The referees should send their recommendations directly to ics@cs.cas.cz.

A proof of the obtained degree.

Informal inquires can be sent to the principal investigator: Milan Paluš, mp@cs.cas.cz