

The Institute of Experimental and Applied Physics (IEAP) is a scientific-academic unit of the Czech Technical University in Prague focused on the Physics of the Microworld and its applications. Its experimental and applied activities are supported by the Department of Theory and Modeling which currently has a vacancy for a:

Senior Research Scientist (f/m) – Astroparticle and Neutrino Theory

The work will consist of elaborating various approaches towards extracting information about neutrino properties from astronomical and cosmological observations. Namely, the effects of photon and proton rays passing through the Cosmic neutrino background (CNB) will be studied with the goal to understand their sensitivity to neutrino mass and neutrino electromagnetic properties. In parallel various scenarios of the CNB neutrino condensation will be elaborated. The work will include actively representing the IEAP in the European Consortium of AstroParticle Theory.

Requirements:

- Ph.D. in physics
- Ability to work independently and the desire to learn new things
- Written and oral communication skills in English
- Experience in writing grant applications is welcome
- Ability to lead a team of 2-4 scientists is welcome
- Candidates should have solid overview about the beyond-SM model building with emphasis on the neutrino sector
- Candidates with knowledge of and experience with Quantum Field Theory, the Finite-temperature QFT and its real-time formalism, and Cosmology
- Knowledge of Mathematica, Matlab, Python, C++ is welcome.

We offer:

- Full time job
- Possibility of long-term contract
- Participation on interesting research grants together with experienced IEAP team
- Competitive salary and 6 weeks of vacation
- Friendly team