



2023 HGF – OCPC – Programme for the involvement of postdocs in bilateral collaboration projects

Title of the project:

Multi-messenger study of turbulence, and Cosmic rays

Helmholtz Centre and institute:

DESY-AP

Project leader:

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Programme Coordinator:

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Description of the project:

We are exploring the basic processes in the large scale plasma, which is closely linked to many astrophysical phenomena ranging from our solar system to the early universe. In particular, the research we do include cosmic rays, high-energy astrophysics, interstellar medium, plasma instabilities, magnetohydrodynamic turbulence and magnetic field detection as well as their influences on various astrophysical problems. Scholars interested in any of the following topics are welcome to join us: 1) Plasma physics, in particular, bridging the basic plasma processes with the modelling of various astrophysical processes; 2) Radio Astronomy and statistical study of astrophysical turbulence; 3) Multiwavelength study in relation to cosmic rays and magnetic fields.



Description of existing or sought Chinese collaboration partner institute (max. half page):
Peking University, Yunnan University, Nanjing University, Beijing Normal University, University of Science & Technology, Sichuan University, National Astronomical Observatory of China (NAOC)

Required qualification of the post-doc:

<Sample text below>

- PhD in ... Physics or Astronomy
- Experience with ... numerical and analytical studies of plasma processes... and/or modeling / analysis of high energy processes
- Additional skills in
- Language requirement... Good command of English.....