FORM FOR EMPLOYERS

INSTITUTION Nicolaus Copernicus Astronomical Center (NCAC)

CITY Warsaw

POSITION post-doc

DISCIPLINE Astrophysics

POSTED 2021/06/21

EXPIRES 2021/07/31

WEBSITE

https://www.camk.edu.pl/en/archiwum/2021/06/21/post-doctoral-position-observational-astronomy/

KEY WORDS: Cepheids; eclipsing binary systems; binary evolution

DESCRIPTION (field, expectations, comments):

Applications are invited for 1 postdoctoral position at the Nicolaus Copernicus Astronomical Center of the Polish Science Academy (CAMK PAN), in Warsaw, Poland, in the fields of pulsating and binary stars. CAMK PAN is the leading astrophysical institute in Poland, hosting about 50 staff researchers and 30 PhD students. CAMK PAN scientists participate in many international projects.

A successful applicant will work with Dr. Bogumił Pilecki as the Principal Investigator on the project "Understanding Cepheids: physical and empirical basis for our main tool for distance determination in the Universe". The position will be funded from a Polish National Science Center (NCN) SONATA BIS research grant (UMO-2020/38/E/ST9/00486). Generous funding for travel and an excellent working environment is secured. This position is offered for two years with the possibility of extension.

The project will be focused mainly on Cepheids in spectroscopic and eclipsing binary systems. Depending on skills and preference the selected candidate will be able to work on the whole scope of the project or specifically on either Cepheids or binary systems (with Cepheid companions). Related personal projects will also be welcome.

The successful applicant will participate in observations, data analysis (radial velocity determination, light curve modeling, SED fitting), and software development. He/she is also expected to regularly present and publish the results, and write applications for observing time. The selected candidate will have the possibility to work, among others, on spectral analysis (including SED fitting), modeling of selected Cepheids in eclipsing binary systems, modeling of pulsation properties of Cepheids, and on evolutionary models of Cepheids and their companions.

Information about our related projects on Cepheids in binary systems can be found at https://users.camk.edu.pl/pilecki/?page=project. Up to date information about this position is available at: https://users.camk.edu.pl/pilecki/?page=jobs.

Requirements to be met by candidates include the following:

- 1. A PhD degree in Astronomy or Astrophysics (a diploma delivered by the start date of the position)
- 2. Proven track record of publications
- 3. Published experience in the field of pulsating stars or binary systems

- 4. Fluent English communication (written and oral)
- 5. High programming skills
- 6. Additional assets: creativity, independence, experience in observations

The preferred starting date for the position is **October 2021** but is negotiable. The salary of the successful candidate will be competitive to that of Polish researchers at the same career stage.

Applications (in pdf format) should be submitted by e-mail with the subject "Postdoc competition" to recruitment@camk.edu.pl and they must include:

1. CV including an information clause available at:

https://www.camk.edu.pl/en/media/uploads_current/o_instytucie/rodo/rodo_deklaracja_ncn_ang.pdf

- 2. List of publications
- 3. Copy of the PhD diploma
- 4. Short statement of research achievements and plans (maximum 2 pages)
- 5. Two letters of recommendation should be arranged to be sent directly by their authors to the same email address

Questions about the position can be sent to: pilecki@camk.edu.pl

For full consideration, applications should be received by 31st July 2021.

The review of the applications will begin soon after this date and continue until the position is filled.