

## **FORM FOR EMPLOYERS**

INSTITUTION Nicolaus Copernicus Astronomical Center of the Polish Academy of Sciences  
(CAMK PAN)

CITY Warsaw, Poland

POSITION **One research assistant position in the field of extragalactic distance scale**

DISCIPLINE Astronomy

POSTED 29.04.2024

EXPIRES 31.05.2024

WEBSITE [www.camk.edu.pl](http://www.camk.edu.pl)

KEY WORDS Astronomy

DESCRIPTION (field, expectations, comments)

### **One research assistant position in the field of extragalactic distance scale**

Applications are invited for 1 research assistant position (equivalent to a PhD student position) at the Nicolaus Copernicus Astronomical Center of the Polish Academy of Sciences (CAMK PAN), in Warsaw, Poland, in the field of extragalactic distance scale.

#### **Job description**

The successful candidate will work with prof. Grzegorz Pietrzynski and dr. Marek Górski on the precision calibration of the tip of the red giant branch (TRGB) and J-region asymptotic giant branch (JAGB) methods. The calibrations will be based on multiband photometric data and geometrical distances recently obtained by the Araucaria team together with data from several archives. The calibrations will play a very important role to measure cosmic distances up to 50 Mpc, determine precisely the Hubble constant, and shed more light of the famous Hubble Tension puzzle.

The successful applicant will work as a member of the Araucaria Group (<https://araucaria.camk.edu.pl/>) planning and executing observations (including those at Cerro Murphy Observatory in Chile), reducing and analyzing the obtained photometric data.

The successful applicant is expected to develop software necessary to achieve the project goals as well as to regularly present and publish the results of her/his work. Experience in observations, analysis of observational data, modern statistical methods and high-level programming languages knowledge (Python preferred) will be considered as assets.

#### **Benefits**

The position will be funded from the European Research Council Synergy grant, agreement no 951549 "Sub-percent calibration of the extragalactic distance scale in the era of big surveys" - UniverScale. The person employed will be a member of the international Araucaria Group

(<https://araucaria.camk.edu.pl/>) with guaranteed access to many telescopes. Observing expeditions and extended research visits to our partner institutions in Chile, France and Germany will be possible. Furthermore, the Araucaria Group has access to all telescopes located in Chile. It also operates a dedicated observatory – Cerro Murphy Observatory in Chile, which hosts 5 small telescopes (0.6-1.5m), located by the construction place of the 40-m ELT. Exceptional weather conditions make this observatory an excellent tool for long term monitoring of variety of distance indicators. In 2025, a 2.5 m telescope is scheduled to be constructed in our observatory, together with several modern instruments, within the framework of the ERC project. Therefore, candidates with observing / instrumental skills would find an excellent environment for their scientific development.

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. The research lines in CAMK, possibilities to develop career for young researchers, and life at the institute are presented in three movies [available here](#).

CAMK PAN is an equal-opportunity employer and supports equal opportunities and diversity in its personnel policy.

The successful applicant will be offered an employment contract with excellent salary and working conditions. The employment contract embraces social security, public medical care, and participation in national pension scheme as well as access to non-public medical care and sports activities co-financed by the employer. She/he can also profit from the relocation costs reimbursement scheme according to CAMK PAN internal rules.

The successful applicant who is not citizen of a member country of the European Union must keep in mind that, prior to signing the contract, she/he must obtain a residence and work permit or visa (according to rules established between Poland and the country of the applicant origin).

#### ***Position and requirements description***

The research assistant position is offered for 3 years . The preferred starting date for the position is September 1<sup>st</sup> 2024, but it is to some extent negotiable. The successful applicant is expected to complete and defend a PhD thesis based on the obtained results of her/his work.

Form of employment: employment contract

Place of employment: CAMK PAN, Warsaw, Poland

Requirements to be met by candidates include the following:

- 1) master degree in physics or astronomy obtained not more than 4 full calendar years ago, candidates who still haven't obtained it will be asked to present it before the employment signature as the degree is an eligibility condition in this competition;
- 2) publication record;
- 3) experience in data reduction, analysis, and observations;
- 4) good programming skills;
- 5) good command of English to enable efficient communication with the team and preparation of scientific reports and publications;
- 6) additional assets: enthusiasm for work, independence, high personal culture, ability to work in a team.

The selection criteria include (equally weighted):

- 1) qualifications;
- 2) professional experience (including informally acquired experience);
- 3) mobility related to scientific and organizational experience.

Applying candidates should submit the following documents (in pdf format):

- 1) copy of the Master degree diploma (if applicable);

- 2) scientific curriculum vitae including a publications;
- 3) motivation letter
- 4) 2 support letters (provided by email)
- 5) scan of printed and signed information clause available [here \(PDF format\)](#);
- 6) other documents proving the fulfilment of the competition criteria;
- 7) short statement of research achievements and scientific plans including the PhD thesis subject.

The above mentioned documents should be submitted by e-mail with a subject "UniverScale Research assistant position" to [recruitment@camk.edu.pl](mailto:recruitment@camk.edu.pl) by **May 31<sup>st</sup>, 2024, 23:59 CET** as the latest.

Questions about the position can be sent to: prof. Grzegorz Pietrzynski [pietrzyn@camk.edu.pl](mailto:pietrzyn@camk.edu.pl) (PI) and/or Ksenia Kempa [kkempa@camk.edu.pl](mailto:kkempa@camk.edu.pl) the Project Coordinator.

The selection of candidates will be executed by a 3-member selection committee in accordance with the *"Resolution of the Scientific Council of the Copernicus Astronomical Centre of the Polish Science Academy (CAMK PAN) on establishing the regulations for the competition for positions of scientific employees at CAMK PAN"*. Shortlisted candidates can expect an invitation for a zoom interview.

The review of applications will begin soon after the deadline and continue until the position is filled. Complaints on the competition results shall be presented by e-mail to [recruitment@camk.edu.pl](mailto:recruitment@camk.edu.pl) within 3 days after receiving the information on the outcomes of the recruitment process and they will be taken up by the selection committee right after this deadline.