

**Competition for PhD students for two scholarship positions in the project  
NCN OPUS-15, nr UMO-2018/29/B/ST9/01793**

**Unit name:**

Astronomical Observatory, Faculty of Physics, Astronomy and Applied Computer Science,  
Jagiellonian University, Kraków

**Position name:** scholarship/PhD student

**Requirements:**

- master's degree in astronomy or physics,
- knowledge of basic radiation processes in astrophysical objects,
- experience in analysis of radio and optical astronomical data,
- basics of programming (e.g. Python, C++),
- advanced knowledge of packages for radio (e.g. AIPS, CASA) and optical data reduction,
- knowledge of English: reading and understanding of professional astrophysical texts,
- communicativeness and creativity as well as the ability to work individually and in a team.

**Task description:**

work in a scientific project entitled *Dynamical evolution of radio galaxies – probing the past of a central supermassive black hole through analysis of associated large-scale radio emission* consisting, among others on:

- planning, conducting astrophysical observations (mainly radio and optical) of selected active galaxies as well as reduction and analysis of observational data,
- imaging multifrequency radio data of selected radio galaxies,
- statistical analysis of physical parameters of selected objects,
- computer modeling of physical processes taking place in the studied radio galaxies.

The type of NCN competition: **OPUS 15**

The deadline for the submission of offers: **31<sup>st</sup> of July 2023, 22:59 UT**

Form of offers: e-mail to: **marek.jamrozy@uj.edu.pl**

The deadline for the settlement of the competition: **1<sup>st</sup> of August 2023.**

**The conditions of employment:**

- scholarship in amount 3000 PLN/month for 5 months.

**The application for the scholarship must contain:**

- cover letter,
- CV with a content clause: "Wyrażam zgodę na przetwarzanie moich danych osobowych zawartych w mojej ofercie dla potrzeb niezbędnych do realizacji procesu rekrutacji zgodnie z Rozporządzeniem Parlamentu Europejskiego i Rady (UE) 2016/679 z dnia 27 kwietnia 2016 r. w sprawie ochrony osób fizycznych w związku z przetwarzaniem danych osobowych i w sprawie swobodnego przepływu takich danych oraz uchylenia dyrektywy 95/46/WE (ogólne rozporządzenie o ochronie danych),
- information about previous scientific achievements (e.g. publications), distinctions and awards, scholarships, participation in workshops and scientific trainings, participation in research projects,
- document confirming the completion of the master's studies,
- document confirming the status of a doctoral student, participant in doctoral school/doctoral studies conducted by an authorized university organizational unit, a scientific institute of the Polish Academy of Sciences, a research institute or an international scientific institute operating in the territory of Poland,
- a statement with information about the processing of personal data along with the consent for their processing, delivered to the secretariat of the Astronomical Observatory, ul. Orla 171, 30-244 Kraków (form to be downloaded from the website: <https://cawp.uj.edu.pl/wynagrodzenia/stypendia>).

The competition committee, after collecting the offers, will qualify the candidates on the basis of submitted documents. Candidates will be informed about the recruitment results immediately after the competition is resolved.