

Project title:

Gravitational-wave progenitors – Completing the picture with multi-purpose binary population synthesis.

Position:

PhD-scholarship

Number of positions: 1

City: Toruń

Website: <https://www.fizyka.umk.pl/en>

Requirements:

Education: A Master's degree (M.Sc.) in Physics, Astrophysics, Computer Science or equivalent

Language: Fluency in written and spoken English.

Description of duties:

The call is open for a 12-month PhD-scholarship research position to perform research work extending the BoOST project and completing the publication of existing stellar evolutionary model sequences computed with the Bonn Code.

The candidate is expected to have experience with the Bonn Code, the BoOST project, stellar evolution modelling of metal-poor massive stars, stellar nucleosynthesis, and a deep understanding of cluster formation and globular-cluster theories (such as the multiple population phenomenon).

Tasks:

The tasks to be carried out are part of the NCN OPUS project 2021/41/B/ST9/00757 (PI: dr hab. Dorottya Szécsi, prof. UMK). Special emphasis will be paid on applying these computer models in cluster formation scenarios and comparing their predictions to observations of globular cluster stars (e.g. matching the light-element anticorrelations, etc).

Competition type: OPUS

Field of science: ST

Deadline for submitting applications: August 18, 2026, 11:59 p.m.

Application form: email: dorottya@umk.pl

Employment conditions:

A scholarship of **5,000 PLN** per month for up to 12 months.

Planned employment period: September 1, 2026, through August 31, 2027

Additional information:

The scholarship is awarded in accordance with the rules set out in the Regulations on the Award of Research Scholarships of the National Science Centre, adopted by Resolution No. 25/2019 of the Council of the National Science Centre dated 14 March 2019.

Required documents (send to mpelc@umk.pl with annotation 2024/55/D/ST3/02384):

- Cover letter (optional)
- CV
- Copies of obtained diplomas and certificates (if any)
- Copy or scan of candidate's publications (if any)
- Information about scientific awards, scholarships and other distinctions (if any)
- Description of current research activity (if applicable)
- Consent to the processing of personal data ([https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.umk.pl%2Fen%2Fjobs%2Fdocs%2Fen_os4.docx&wdOrigin=BROWSE LINK](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.umk.pl%2Fen%2Fjobs%2Fdocs%2Fen_os4.docx&wdOrigin=BROWSE_LINK)).
- Certificate of PhD student status.

Applicants will be evaluated by a selection committee appointed by the Dean of the Faculty of Physics, Astronomy and Informatics. The committee will recommend the awarding (or rejection) of the scholarship no later than September 20, 2026.

Candidates will be notified of the outcome of the competition by e-mail.

In the event of resignation of the selected candidate, the right to indicate the next candidate from the ranking list is reserved.

All documents should contain the candidate's signature or its scan.

Language of application: Polish or English.