

# Institute of Mathematics of the Polish Academy of Sciences

*announces a competition for a student scholarship under the NCN-OPUS project*

## **Applications of graph and higher-rank graph algebras in noncommutative geometry**

### **1 Requirements:**

The NCN scholarship may be awarded to a person who meets any of the following criteria: a) is a student of: first-cycle, second-cycle or uniform master's studies at universities in Poland; b) is a PhD student enrolled in doctoral studies; c) is a PhD student at a doctoral school. The requirements for this contest are as follows:

1. Education: at least a bachelor's degree or being a student of the 4th year of uniform master's studies in the fields of mathematics, computer science or physics.
2. Experience in the analysis of combinatorics of directed graphs.
3. Fluency in English at a level enabling both oral and written communication as well as reading professional literature.
4. Motivation for further learning and expanding professional skills.

### **2 Job description:**

1. Scientific collaboration in the field of combinatorics of directed graphs with particular emphasis on the optimization of finite graphs with respect to the number of paths of a fixed length. If possible, the collaboration should be completed with a joint scientific publication in this regard.
2. Participation in scientific seminars organized by the Principal Investigator of the project.

### **3 Further information:**

This scholarship is in the amount of **PLN 1,200 per month** gross, paid for 10 months from 7 April 2022 to 6 February 2023. Applications should be sent only by e-mail to the address *pmh@impan.pl* by **4 April 2022** at the latest. If you do not receive confirmation of receipt of your application within one business day, please contact the Institute of Mathematics of the Polish Academy of Sciences (22 5228100, *im@impan.pl*) immediately. The application should include PDF files containing:

1. A current curriculum vitae with a list of publications, if any.
2. Scan of the certificate of being a student / doctoral student.
3. Motivation cover letter.
4. Standard consent to data processing (GDPR).

*Principal Investigator Prof. Piotr M. Hajac*

Zastępca Dyrektora ds. Naukowych  
Instytutu Matematycznego PAN



dr hab. Piotr Nowak