

## **INSTITUTE OF MATHEMATICS**

## POLISH ACADEMY OF SCIENCES

## Competition for a scholarship in the Sonata Bis grant

The Institute of Mathematics of the Polish Academy of Sciences announces a competition for one scholarship for a student within the Sonata BIS project led by Dr. hab. Błażej Wróbel.

Type: student's scholarship

**Project:** "Dimension-free estimates in harmonic analysis and beyond it", National

Science Centre, Poland (NCN), Sonata Bis, nr 2022/46/E/ST1/00036

**Application deadline:** April 9th, 2023 (23:59 CET) **Expected start of scholarship:** April/May 2023

**Conditions.** Financing duration: up to 18 months. Amount: 2500 PLN/month. Primary place of work: Wrocław.

**Requirements.** The scholarship is intended for a student of second degree studies (master) in mathematics. Candidates should have very good knowledge of Fourier analysis and functional analysis. Familiarity with topics in analytic number theory related to Waring's problem is also expected. Candidates should have good command of the English language and strong motivation for research.

**Tasks description.** The chosen candidate will participate in the realization of the research project "Dimension-free estimates in harmonic analysis and beyond it". She/He will deal with problems related to research task nr 2 "Dimension-free estimates for discrete maximal operators". These problems concern counting lattice points in high-dimensional balls, among others. The goal of the participation in the project is to write an article or articles related to the above mentioned research task.

## **Required documents:**

- 1. Scientific CV.
- 2. E-mail address of a person who can be asked for an opinion about the candidate.
- 3. Copy of the diploma of finishing first degree studies (bachelor).
- 4. File of the bachelor thesis.
- 5. Description of mathematical interests (up to 1 page A4).

Criteria for candidate's assessment. The scholarship holder will be chosen by a committee composed of: prof. dr hab. Adam Nowak, dr hab. Marcin Preisner and dr. hab. Błażej Wróbel (chairmen). The scholarship will be granted according to regulations for granting scientific scholarships of NCN. An interview may be conducted with chosen candidates. In case there are no appropriate candidates the competition may finish inconclusive.

Interested candidates should send before April 9th 2023 (23:59) the aforementioned documents at the e-mail address: **bwrobel@impan.pl.** More information can be obtained from the Principial Investigator.

Deputy Director
Institute of Mathematics of PAS

Dr. hab. Piotr Nowak