

## Competition notice

### PRELUDIUM BIS

Project title: Fatou theorems for harmonic functions and mappings and their generalizations

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#### Project description:

The main subject of the project are the Fatou-type theorems for harmonic functions and mappings (including the  $p$ -harmonic and the  $A$ -harmonic type equations) in Euclidean domains, on Riemannian manifolds and in Carnot-Carathéodory groups. The nontangential limits and geometry of domains will play a significant role in the project. The project is part of the grant Preludium Bis 2 *"Fatou theorems for harmonic functions and mappings and their generalizations"*.

The PhD student will investigate proposed problems, conduct research, prepare results for publication, attend seminars and conferences, deliver presentations, also collaborate with other researchers.

#### Requirement

The call is open to all those who are not PhD holders and are not students at the doctoral schools.

- very good knowledge of mathematical analysis,
- good knowledge of partial differential equations,
- good command of English

#### Discipline: mathematics

#### Admission limit: 1

#### Recruitment schedule

- registration in the Internet Registration of Candidates, referred to as "IRK", submitting an application to the IRK: 01.07.2021 - 22.07.2021
- qualification procedure: 26.07.2021 - 28.07.2021
- announcement of the ranking list: until 06.08.2021
- accepting documents from qualified candidates: 09.08.2021 – 23.09.2021 until 2 p.m.
- announcement of the list of accepted candidates: until 28.09.2021

#### Recruitment fee

150 PLN

#### Form of the selection procedure

Evaluation of the following elements shall be taken into account in the selection process:

- 1) scientific activity of the candidate based on a CV or resumé, documented with scans of materials attached to the application for admission to the School;
- 2) interview with the candidate / qualification examination
- 3) other achievements.

### **Language of the selection process, including the interview**

The interview shall be carried out in Polish or English – in accordance with the candidate's preferences presented in IRK. If the Polish language is selected, the interview will include parts in English.

### **Required documents**

The candidate shall submit a School admission application only through the IRK. The application shall include the following:

- 1) indication of the selected discipline in which the candidate plans to pursue education. By submitting an application for admission to the Doctoral School is understood as submitting a completed and paid recruitment application via the Internet Recruitment of Candidates (IRK). Submission of an application via the IRK is tantamount to submitting an application for admission to the Doctoral School chosen by the candidate;
- 2) a scan of the graduation diploma of uniform master's degree or postgraduate studies or an equivalent diploma obtained under separate regulations or in the case of candidates pursuing education within the European Higher Education Area – a certificate of obtaining a Master's degree or a declaration that the diploma or certificate of obtaining a Master's degree shall be provided by 23.09.2021 – declaration form. In the case of a diploma equivalent to a uniform master's degree or postgraduate studies graduation diploma, a candidate shall justify such equivalence. In case the diploma was issued in a language other than Polish or English, the candidate shall attach its certified translation;
- 3) a resume or CV outlining the candidate's scientific activity, including scholarly interests and achievements during the five calendar years preceding the application (if a candidate became a parent during this time, as evidenced by a scan of the child's birth certificate attached to the application, this period shall be extended by two years for each child), including, but not limited to:
  - publications,
  - research and organizational work at student research groups,
  - participation in scientific conferences,
  - participation in research projects,
  - awards and honorable mentions,
  - research internships,
  - research skills training programs completed,
  - activities promoting science,
  - activity in science movement representative bodies,
  - average of their university grades,
  - professional career,
  - level of proficiency in foreign languages;
- 4) scans of materials evidencing scientific activity mentioned in their CV and/or resume;
- 5) a document confirming at least B2 proficiency level in English or a declaration of the level of proficiency in English allowing education at the School;
- 6) the scan of a declaration by the planned supervisor, confirming their agreement to undertake the duties of a supervisor and of the number of doctoral students, for whom they perform the duties a designated supervisor, in accordance with the template constituting Appendix no.4 to the Resolution no. 17 of the Senate of the University of Warsaw of 20th January 2021 on rules of admission to doctoral schools at the University of Warsaw (the University of Warsaw Monitor of

- 2021, item 13, as amended), the candidate may also attach a scan of opinions of other academics about the candidate and their scientific activity and/or proposed research project;
- 7) the photograph of a candidate's face that allows for their identification;
  - 8) a declaration confirming whether the candidate was or is a doctoral student or a participant of doctoral studies or whether they have initiated a doctoral dissertation process or whether proceedings to award them a doctoral degree have been initiated – and if yes, the title of their doctoral dissertation or the research project prepared by a candidate, including the name and last name of the candidate's tutor or supervisor;
  - 9) a declaration confirming that they have reviewed the Resolution no. 17 of the Senate of the University of Warsaw of 20th January 2021 on rules of admission to doctoral schools at the University of Warsaw (the University of Warsaw Monitor of 2021, item 13, as amended) and Articles 40 and 41 of the Code of Administrative Procedure;
  - 10) scanned transcripts of records of the graduate and postgraduate studies or the uniform Master's degree studies, or equivalent documents (e.g. diploma supplement);
  - 11) abstract of the master's thesis or master's project in English (up to 3,000 characters with spaces);

### **Evaluation criteria**

The committee shall evaluate the candidates by awarding them points for their competencies to perform specific tasks in a research project and scientific achievements to date. On the basis thereof, the committee shall rank the candidates according to the following criteria:

- a) competencies to perform specific tasks in a research project (70% of the final score)
  - 3 points - very good
  - 2 points – good
  - 1 point – poor
  - 0 points - no competencies
- b) publication track record, including publications in renowned scientific papers / magazines (30% of the final score)
  - 4 points – prominent
  - 3 points - very good
  - 2 points – good
  - 1 point – poor
  - 0 points - no publication track record

### **Education program**

The education lasts 4 years. It includes obligatory classes (no more than 300 hours in total during the whole period of education) and the implementation of an individual research program, carried out under the supervision of a supervisor. Beginning of education – October 1, 2021.

### **Scholarships**

PRELUDIUM BIS doctoral scholarships shall amount to:

- PLN 5,000 gross gross per month, by the month in which a PhD student's mid-term evaluation is performed at the doctoral school and
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shall be awarded pursuant to the Act on Higher Education and Science of 20 July 2018.