

PhD Scholarship

in project funded by Foundation for Polish Science (HOMING programme)

Normative Comparison of Multi-Winner Election Rules

We are looking for a PhD student interested in scientific research.

About the project: A multi-winner election rule is a formal process for selecting a subset of candidates based on the preferences of voters. A number of different scenarios can be expressed in the framework of multi-winner elections; the examples include: shortlisting candidates for an interview, electing a group of representatives for a society (e.g., a country's parliament or a university senate), choosing locations for public facilities in a city, or designing a targeted advertising campaign. While all these scenarios can be described by the same abstract framework, they might call for fundamentally different election rules. It is important to be able to match these peculiar applications with rules that would be most appropriate for them. This motivates our study of tools that could allow the decision-maker to compare different election rules in a principled way. The goal of the project is to examine several strategies that can be used to obtain a better understanding of the nature of various multi-winner rules.

The project is implemented at the Faculty of Mathematics, Informatics, and Mechanics, University of Warsaw in years 2018-2020.

The principal investigator is Piotr Skowron.

Conditions: PhD scholarship is 4500 PLN/month. Scholarship can be combined with other scholarships. Start: July-October 2018; end: May 2020.

Requirements:

- applicant has to be a PhD student on October 1, 2018,
- 100% involvement in the project (full-time),
- fluency in English.

Additional advantage:

- good background in discrete mathematics and algorithms,
- participation in social choice or game theory courses.

Recruitment procedure: Committee appointed by the principal investigator will select students awarded with the scholarship. With selected candidates committee will conduct an interview.

Candidates interested in the scholarship can apply by sending an application to the address p.skowron@mimuw.edu.pl. The application should consist of a CV, certificate of academic record and one-page description of research achievements (if applicable).

The deadline for applications is **June 20, 2018**.



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