# PhD research topic proposal BME, Doctoral School of Mathematics and Computer Science

#### Name and degree of supervisor :

Attila Maróti, research professor

## Are you willing to supervise Stipendium Hungaricum applicants?

No

#### Title of the topic:

Random walks on finite groups

#### Short description:

Random walks on finite groups is an old but lively area in mathematics. There are many results on random walks in simple groups based on their conjugacy classes. It would be interesting to obtain similar theorems on random walks based on certain generating subsets (different from conjugacy classes) of the simple groups. Finite nilpotent or finite solvable groups could also be a focus of study.

# **Requirements:** finite group theory, representation theory of finite groups, probability theory **Contact:**

E-mail:

maroti@renyi.hu

### Place of work:

Alfréd Rényi Institute of Mathematics, Budapest