PhD research topic proposal

BME, Doctoral School of Mathematics and Computer Science

Name and degree of supervisor :

Péter Pál Pach, PhD

Are you willing to supervise Stipendium Hungaricum applicants?

Yes

Title of the topic:

Arithmetic combinatorics

Short description:

The goal is to study and solve various problems from Arithmetic Combinatorics, which is a relatively young but quickly expanding area of Mathematics.

A typical question to be investigated is how large a subset of the integers (or a finite group) avoiding a certain arithmetic configuration (for instance, a k-term arithmetic progression, a zero-sum, etc) can be.

Special attention would be devoted to algebraic methods, and the nature of the problems predicts that applications in related fields like Number Theory and Computer Science are also expected.

Requirements:

Adequate command of English language, good problem solving skills.

Contact:

E-mail:

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Place of work:

BME, VIK, Department of Computer Science and Information Theory