

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

Name and degree of supervisor :

Pál Burai, PhD

Are you willing to supervise Stipendium Hungaricum applicants?

Yes

Title of the topic:

Quasi-arithmetic expressions

Short description:

The class of quasi-arithmetic expressions is a far generalization of the class of quasi-arithmetic means. These maps can behave quite pathologically, and they are not necessarily continuous.

A possible applicant should learn first the theory of quasi-arithmetic means.

Research task should be the characterization of quasi-arithmetic expressions, finding the homogeneous and the translative members of this class. The comparability problem is also open. Moreover, problems involving the Gauss composition of such functions can be also interesting.

Requirements:

Thorough knowledge in real analysis, some knowledge in real function theory and algebra.

Contact:

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Place of work:

BME, Faculty of Science, Institute of Mathematics, Department of Differential Equations