

PhD research topic proposal (template)

BME, Doctoral School of Mathematics and Computer Science

Name and degree of supervisors :József Pitrik (PhD)

Are you willing to supervise Stipendium Hungaricum applicants?

Yes

Title of the topic: Quantum Optimal Transport Theory

Short description:

Optimal transport has become a rich and active field of mathematical research, creating new connections between analysis, probability, and geometry, with many applications to other sciences. Recently, there has been rapidly growing interest in developing non-commutative (or quantum) extensions of optimal transport by researchers in various different areas of mathematics, often with very different motivations. The aim of the doctoral proposal is to examine these areas, with particular attention to the metric properties induced by the quantum optimal transport problem and its applications.

Requirements: The candidate must have strong knowledge of functional analysis and matrix analysis.

Contact:

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Place of work:

BUTE