PhD research topic proposal

BME, Doctoral School of Mathematics and Computer Science

Name and degree of supervisor:

| István Faragó |
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| Are you willing to supervise Stipendium Hungaricum applicants? |
| No |
| Title of the topic: |
| Mathematical modelling of epidemic propagation |
| Short description: |
| One of the oldest problems in the area of applied differential equations is the investigation of the spread of diseases. In this research the different models are investigated, namely, the models which are constructed by differential equations, and also their discretized by finite difference methods models. The different qualitative properties are considered. |
| Requirements: Strong knowledge in numerical analysis and theory of differential equations, good proficiency in Matlab or Python programing. |
| Contact: E-mail: |
| faragois@math.bme.hu |
| Place of work: |
| Institute of Mathematics, Department of Differential Equations |