

SSMI-Seminar

Event date: Tuesday May 17th, 2022, 2:00 pm

Event location: PP6 room, Iuliu Maniu st., no.50, Braşov, Romania

Speaker: Dr. Hab. **Filip STROBIN**, Politechnika Łódzka, Instytut Matematki, Poland

An introduction into the Hutchinson-Barnsley theory of fractals with applications in real world modelling

During the talk I will present a background of the Hutchinson-Barnsley theory of fractals.

I will start with basic definitions of iterated function systems (IFSs) and their attractors, and with the classical result of Hutchinson on generating attractors by contractive IFSs.

Then I will present some natural examples of classical fractals which are attractors of IFSs – amongst them the Cantor ternary set, the Sierpinski gasket or the Koch snowflake.

Finally, I will show that many objects from real world have (in certain scale) fractal structures, and that the Hutchinson-Barnsley theory gives natural algorithms for modeling most of them.