Piotr Oprocha

Invers limits of graphs and derivative zero on Cantor set

(joint work with J. Boroński and J. Kupka)

*Faculty of Applied Mathematics, AGH University of Science and
Technology,*
al. Mickiewicza 30, 30-059 Kraków, Poland
oprocha@agh.edu.pl

Combinatorial graphs can serve as a nice tool for description of dynamical systems on Cantor set. A classical example of this type are Bratelli-Vershik diagrams. Recently, Shimomura, motivated by works of Akin, Glasner and Weiss, developed an alternative approach, which helps to describe dynamical systems on Cantor set by employing inverse limit of graphs. This approach provides new useful tool for description of dynamical systems on Cantor set.

As a particular application of this approach we will present a method of construction of maps on Cantor set, with derivative zero (after embedding in real line) and various dynamical properties.