

SCMS Seminar



MINIMAL SETS AND SPACES

Speaker: Piotr Oprocha
AGH UST

Time: 15:00-16:00, Wednesday, Jan 31st, 2018

Venue: Room 1801, East Guanghua Tower (Main), Fudan University

Abstract:

This is a joint work with J. Boronski and A. Clark.

The following well known open problem is answered in the negative: Given two compact spaces X and Y that admit minimal homeomorphisms, must the Cartesian product $X \times Y$ admit a minimal homeomorphism as well? A key element of our construction is an inverse limit approach inspired by combination of a technique of Aarts & Oversteegen and the construction of Slovak spaces by Downarowicz & Snoha & Tywoniuk. We will also provide a few possible applications of developed tools.

$$\Delta y_i = \int_{x_i}^{x_{i+1}} y' dx - \left(\sum_{j=1}^{i-1} a_{ij} x_j^{(k)} + \sum_{j=i+1}^n a_{ij} x_j^{(k)} \right)$$
$$\int_{x_k}^{x_{k+1}} f(x, y) dx = \int_{x_k}^{x_{k+1}} y' dx = y(x)$$
$$-\sqrt{(y_n + 0.5\tau k_1)^2 + (t_n + 0.5\tau)^2}$$