

SCMS Seminar



HEREDITARILY INDECOMPOSABLE CONTINUA AND ENTROPY

Speaker: Prof. Piotr Oprocha
AGH University of Science and Technology, Poland

Time: 16:00 p.m.-17:00 p.m., Friday, March 3rd, 2017

Venue: Room 2201, East Guanghua Tower (Main), Fudan University

Abstract:

One-dimensional hereditarily indecomposable continua are mathematical objects of complicated structure, and their discovery is a part of history of Polish mathematical school. It is known since 1980s that such continua may arise as attractors in discrete dynamical systems on surfaces. Since then some insight into the topic has been made, however many questions still remain unanswered.

A particular example of such a question asks about admissible values of topological entropy on pseudo-arc or pseudo-circle.

The aim of this lecture is introduction into the above topic and survey of some more recent results.

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