

## Title:

With Fractals, Towards a Fundamental Scale.

## Abstract:

In this talk we will navigate on the borderlines between fractals theory, continuum topology and metric geometry. We will introduce an interesting mathematical structure emerging from the hyperspaces of the circle of pseudo-arcs and the Menger-cube of pseudo-arcs. In these hyperspaces the smooth and non-smooth partitions are connected by a boundary region, which can be interpreted as a mathematical model for a fundamental scale. The existence of a fundamental (Planck) scale, an infimum of positive measurements, it is assumed by various quantum theories.

## Speakers

András Domokos