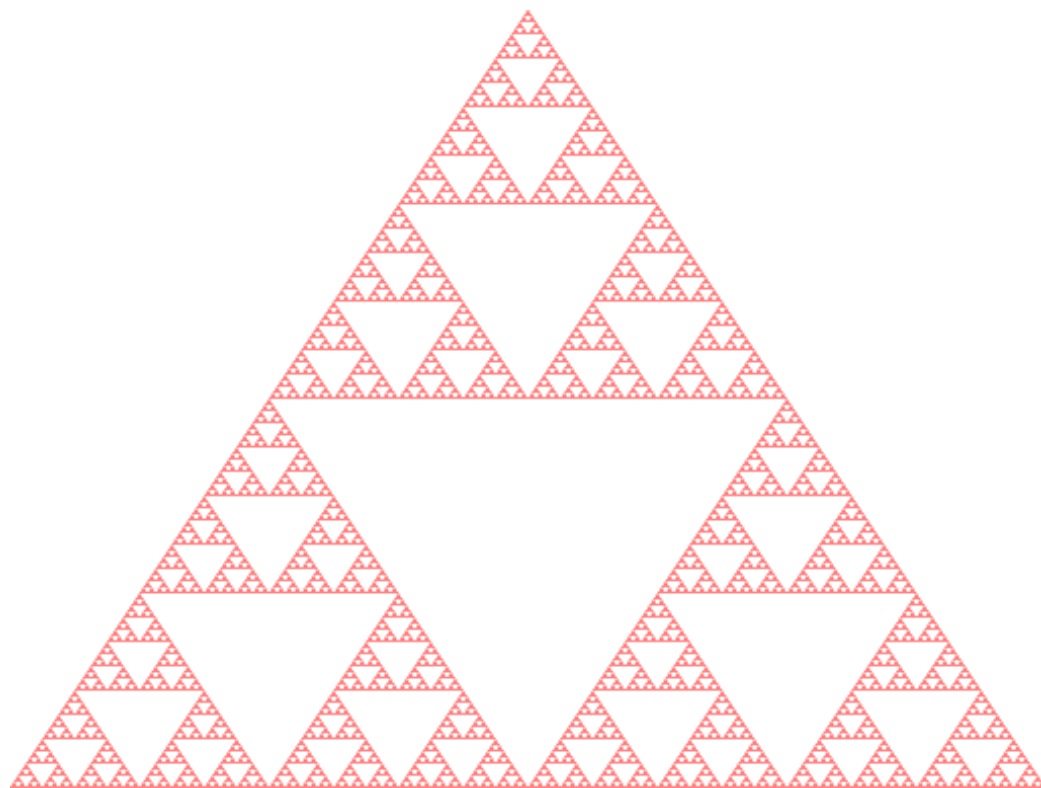


PUBLIC TALK



Groups, fractals and spectra

Tatiana SMIRNOVA-NAGNIBEDA (UNIGE)

WHEN: Friday, May 8, 2026 | 14:00

WHERE: Section of mathematics, Lecture room, 8th floor

ABSTRACT

A group is a fundamental mathematical concept used to describe symmetries. In this talk, we focus on self-similar groups which arise as groups of symmetries of infinite rooted trees and whose structure reflects self-similarity of the trees. These groups play an important role in Geometric Group Theory and also found interesting applications in Spectral Graph Theory, providing examples of infinite graphs that illustrate remarkable phenomena such as cospectrality, gaps in the spectrum, singular spectral measures.

In the framework of the nomination for promotion of Prof. Tatiana Smirnova-Nagnibeda to full Professor in the Section of Mathematics

PROGRAM

14:00-14:15 Welcome and presentation of the committee members

14:15-14:55 Lecture "Groups, fractals and spectra" by Tatiana SMIRNOVA-NAGNIBEDA

14:55-15:15 Questions after the lecture and coffee break

ABOUT THE SPEAKER



Tatiana Smirnova-Nagnibeda

Tatiana obtained her PhD at UNIGE. Subsequently, she held positions at ETH Zurich and KTH Stockholm before re-joining UNIGE as a professor.

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