

## SALZBURG MATHEMATICS COLLOQUIUM Summer 2025

Jörg Thuswaldner (Leoben)

## "Around the Rauzy fractal"

May 22, 2025

## Abstract:

In 1982 G. Rauzy invented what is now called the Rauzy fractal. He used this set in order to prove that a certain symbolic dynamical system on three letters is isomorphic to an irrational rotation. In the meantime, the Rauzy fractal has been generalized in various ways and could be applied in various contexts.

In my lecture, I will provide the definition of the Rauzy fractal and discuss some of its properties and applications in word combinatorics, number theory, and in the theory of dynamical systems.

Thursday, **15:00-15:45** Hörsaal 414, 1. Stock

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