We take syntax seriously!

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Motto: The limits of my language mean the limits of my world.

- Ludwig Josef Johann Wittgenstein

Abstract: Most mathematicians believe they use logic making proofs. But can we proof theorems studying the language they are written in? We will follow the decadent ideas that emerged (among others) in Vienna during the fin de siecle.

The lecture would introduce first order logic and discuss basic tools of model theory. As an example we will sketch the logic proof of Ax-Grothendieck theorem that every injective polynomial self-map of \mathbb{C}^n is surjective.

The introductory talk will discuss the notion of residually finite groups.

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