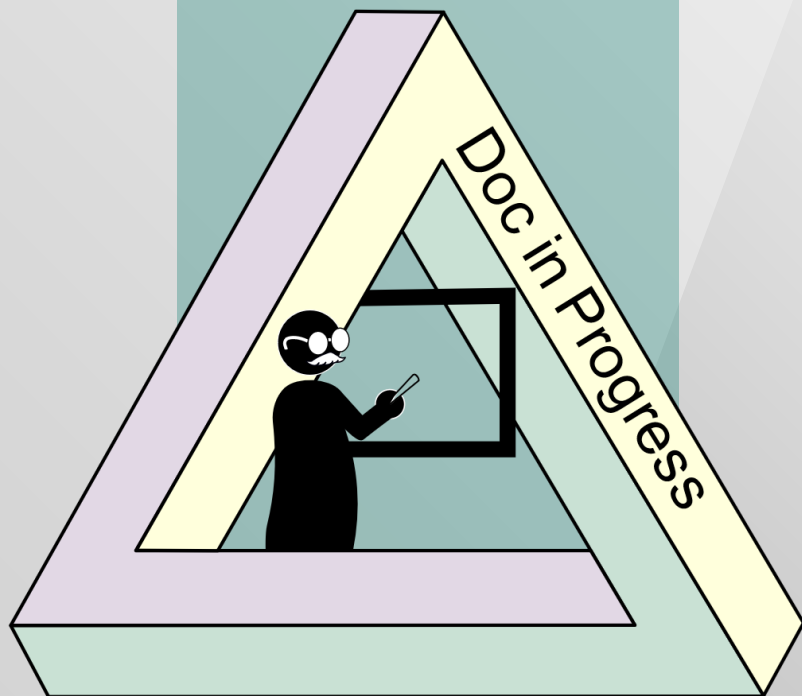




UNIVERSITÀ  
DI TRENTO

Dipartimento di  
Matematica



PhD in Mathematics

“Doc in Progress” is pleased to introduce you to

**Enrico Savi**

University of Trento

PhD in Mathematics

## (Real) Algebraic Geometry over $\mathbb{Q}$

In this seminar I will present some notions of algebraic geometry over subfields introduced and studied in depth in a recent work by Fernando and Ghiloni. I will give an idea of why the most interesting cases to study are those in which the ground field is a real closed field, such as  $\mathbb{R}$ , and the subfield is not real closed, such as  $\mathbb{Q}$ . We will introduce several notions of real algebraic sets to be described over  $\mathbb{Q}$  and explain some characterizations via Galois theory proved by Fernando-Ghiloni and Ghiloni and the speaker. Time permitting, I will give an insight into which class of algebraic sets described over  $\mathbb{Q}$  is adequate for solving the  $\mathbb{Q}$ -algebraization problem by means of algebraic approximation techniques.



Thursday, April 20 – 16:00 CEST

The seminar will take place in room “Aula Seminari 1” (Department of Mathematics). If needed, please contact [docinprogress.unitn@gmail.com](mailto:docinprogress.unitn@gmail.com) using an institutional e-mail address to ask for a Zoom streaming of the event.

[docinprogressunitn.wordpress.com](http://docinprogressunitn.wordpress.com)