

Mini-Course (15 to 19 April)

Abstract

Riccardo Brasca,
Université Paris Cite, France

*An introduction to the Lean proof assistant for
mathematicians*

The goal of this series of lectures is to give an introduction to formalization of mathematics: this is the process of using a computer to reason. I will explain what formalizing mathematics means and why it is interesting and useful for people interested in "standard" mathematics. I will show how this is done in practice using Lean, one of the several proof assistants available today. We will go through several techniques to formalize various areas of mathematics, from algebra to number theory to analysis. This is not a course in logic nor foundations of mathematics, in particular no prior knowledge of these topics is needed.