Speaker : Reinhard Kahle

May 9th, 13:00

An overview of mathematical proof theory

Starting from investigations of subsystems of analysis, proof theory has made great progress by looking at contiguous frameworks also: Kripke–Platek set theory, explicit mathematics, fixed point theories, constructive set theory, and Martin–Löf type theory. We will present the known results within this landscape. The conceptional parallels and differences of the formalized mathematical principles will be discussed, as well as the usual methods used for the proof theoretic analysis.