Speaker: M. *Lupini (Bologna, It)*

Title: *Definable refinements of classical algebraic invariants*

Abstract: In this talk I will explain how methods from logic allow one to construct refinements of classical algebraic invariants that are endowed with additional topological and descriptive set-theoretic information. This approach brings to fruition initial insights due to Eilenberg, Mac Lane, and Moore (among others) with the additional ingredient of recent advanced tools from logic. I will then present applications of this viewpoint to invariants from a number of areas in mathematics, including operator algebras, algebraic topology, and homological algebra.