Bern-Fribourg Graduate Seminar

a seminar for Master and PhD students

Thursday 8th May, 2025: 17:15 - 18:00 Room 2.52, Perolles 08, Fribourg

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Iwasawa algebras and p-adic L-functions

Abstract

The Iwasawa algebra plays a fundamental role in the study of p-adic L-functions, which are a central topic in number theory. It arises naturally in this context as a tool for understanding the behavior of certain arithmetic invariants, such as Selmer and class groups, in towers of number fields. It has applications in various areas of number theory, including the study of special values of L-functions, and the Bloch-Kato and Iwasawa main conjecture. In this talk we will introduce Iwasawa algebras and give some basic properties. We'll then explore how these algebras are related to p-adic L-functions, and introduce the main conjecture of Iwasawa theory.