
THE WEIZMANN INSTITUTE OF SCIENCE
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE
Algebraic Geometry and Representation Theory Seminar

Room 261 ,Ziskind Building
on Wednesday, Dec 09, 2015at 11:00

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Non-commutative Iwasawa algebras

Abstract:

Non-commutative Iwasawa algebras are completed group rings of compact p -adic Lie groups with $\text{mod-}p$, or p -adic integer, coefficients. They can also be viewed as rings of continuous p -adic distributions on the group in question. These algebras have found applications in several areas of number theory, including non-commutative Iwasawa theory and the p -adic local Langlands correspondence, but they also provide interesting examples of non-commutative Noetherian rings which are similar in certain respects to universal enveloping algebras of finite dimensional Lie algebras. After giving the basic definitions and some examples, I will advertise some open questions on the algebraic structure of these Iwasawa algebras.