Higher K-theory via universal invariants

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Resumo: In the fifties, Grothendieck introduced a very simple and elegant construction, the Grothendieck group K_0, in order to formulate a far reaching generalization of the Riemann-Roch theorem. Later, through revolutionary topological techniques, Quillen extended the Grothendieck group to a whole family of higher K-theory groups K_n. However, in contrast with K_0, these higher K-theory groups remained rather mysterious. In this talk I will explain how to bridge this gap.

palavras-chave: Algebraic K-theory; Homotopical algebra.