Bott Periodicity in Topological, Algebraic and Hermitian K-theory

ABSTRACT

Since Bott proved his famous periodicity theorems in 1959, a lot of work has been done in order to ``understand" them from various points of view. In this lecture, we make a tour of about 45 years of mathematics, starting from the topological/analytic viewpoint (Grothendieck, Atiyah, Hirzebruch) and ending with recent achievements in algebraic K-theory.