
BERN-FRIBOURG GRADUATE SEMINAR

a seminar for Master and PhD students

Thursday 30th October, 2025: 16:15 - 16:45

Room 2.73, Perolles 08, Fribourg

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Orientations, Clifford Modules, and Bott Periodicity

Abstract

The notion of orientations and orientability is a well understood concept in general, but when this is abstracted to homology theory one can ask: what is the case for a general extraordinary (co)homology theory? In seeking to answer this question for the case of K-theory, one finds some quite surprising links. In this talk we will outline this abstraction of orientations, and look at the case of spheres, where one can immediately see how representations of Clifford algebras are connected with the Bott periodicity phenomenon.