
BERNARDO URIBE JONGBLOED, Universidad del Norte
Stringy structures in cohomology and K-theory of orbifolds

The adjective stringy was coined by Yongbin Ruan in order to denote those structures that can be associated to orbifolds which are constructed from loops or strings on the orbifold. The first one was the orbifold cohomology of Chen-Ruan and then several others appear in the literature such as the stringy product on twisted orbifold K-theory of Adem-Leida-Ruan and the Stringy K-theory of Jarvis-Kaufmann-Kimura. These stringy K-theory structures once applied to an orbifold point $[*/G]$ could be understood as the isomorphism classes of representations of a twisted Drinfeld double of G . In this talk I will explain how the study of the isomorphism classes of twisted Drinfeld doubles gives us information on nontrivial isomorphisms of stringy K-theories for different orbifolds.