

Geometry, Topology and Physics seminar

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HH-3026, 4:00p.m.

Moduli Spaces of Vector Bundles over a Real Curve

Abstract:

Moduli spaces of holomorphic bundles over a complex projective curve have been an important object of study in mathematics for more than 50 years. In a highly influential paper from the '80s, Atiyah and Bott used Morse theory and the Yang-Mills functional to compute the rational Betti numbers of these moduli spaces. More recently, the moduli space of vector bundles over a real curve has garnered a great deal of interest. I will define these moduli spaces, and explain how to adapt the Atiyah-Bott method to compute their Betti numbers in characteristic 2.