Public Abstract

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Title:Inertial Chow Rings and a New Asymptotic Product

Cohomology is an important tool in describing an orbifold. Certain invariants and structural qualities are encoded by what is known as an orbifold cohomology ring. The algebraic analogue of this is called the orbifold Chow ring.

The thesis consists of two main parts. The first addresses the question of how to compute a larger class of rings known as inertial Chow rings. We distinguish between the contributions of the space itself and the contributions of the type of inertial product chosen.

The second part introduces a new type of Chow ring for these spaces. We prove the product is associative and show how it is computed.