



*Institute of Mathematical Research
Department of Mathematics*

GEOMETRY SEMINAR

Chern-Fulton classes of \mathbf{f} -schemes

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Abstract

The Chern-Fulton class is a generalization of Chern class to the realm of arbitrary embeddable schemes. While Chern-Fulton classes are sensitive to non-reduced scheme structure, they are not sensitive to possible singularities of the underlying support, thus at first glance are not interesting from a singularity theory viewpoint. However, we introduce a class of objects which we think of as 'fractional schemes', or \mathbf{f} -schemes for short, and then show that when one broadens the domain of Chern-Fulton classes to \mathbf{f} -schemes one may indeed recover singularity invariants of varieties and schemes.

Date: February 9, 2015 (Monday)

Time: 4:00 – 5:00pm

Place: Room 210, Run Run Shaw Bldg., HKU

All are welcome