



Analysis, Algebra & Geometry Meetings

DIPARTIMENTO SMFI - UNIVERSITÀ DI PARMA

14.10.2024

16:30

AULA RIUNIONI - PLESSO DI MATEMATICA

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AN INFORMAL DISCUSSION ON KÄHLER MANIFOLDS

Rational formality is a well known property of Kähler manifolds or, more generally, $\partial\bar{\partial}$ -manifolds. Notably, the known proofs of formality of Kähler manifolds do not translate in the analogous holomorphic setting: bigraded homotopy theory. The goal of this talk is to discuss these notions of formality and provide examples of non-formal projective manifolds. To this end, we will show that certain higher cohomology operations (ABC-Massey products) are generally non-trivial on projective manifolds.

This talk is based on a joint work with Jonas Stelzig and Leopold Zoller.