

## A-infinity structures on almost complex manifolds

*jeudi 28 octobre 2021 09:00 (50 minutes)*

Dolbeault cohomology is a fundamental cohomological invariant for complex manifolds. This analytic invariant is connected to de Rham cohomology by means of a spectral sequence, called the Frölicher spectral sequence. In this talk, I will explore this connection from a multiplicative viewpoint: using homotopy-theoretical methods, I will describe how products (and higher products) behave in the Frölicher spectral sequence. Then, I will review an extension of the theory to the case of almost complex manifolds and talk about some open problems in geometry that may be addressed using homotopy theory.

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