## Talk on September 23, 2024, 11:30 am

Speaker:	Prof. Joana Cirici, Universitat de Barcelona
Title:	Batalin-Vilkovisky and hypercommutative algebras in complex geometry

## Abstract:

I will review some constructions of BV and hypercommutative algebras for manifolds with additional geometric structures, ranging from Poisson to Hermitian and generalized complex manifolds. Such algebra structures are related to the extended deformation theory introduced by Barannikov and Kontsevich for Calabi-Yau manifolds. I will explain how, using mixed Hodge theory at the homotopical level, one can prove hypercommutative formality of compact Kähler manifolds. This talk includes joint results with Geoffroy Horel and with Scott Wilson.