ID de Contribution: **31** Type: **Non spécifié**

On the Laplace-Beltrami operator on compact complex spaces

jeudi 1 juin 2017 14:50 (25 minutes)

During the last decades analysis on complex projective varieties endowed with the Fubini-Study metric and more generally on Hermitian complex spaces has been an active research field. In this talk we will present some recent results about the Laplacian in the setting of compact Hermitian complex spaces. More precisely let (X, h) be a compact and irreducible Hermitian complex space of complex dimension v > 1. We will show that the Friedrich extension of both the Laplace-Beltrami operator and the Hodge-Kodaira Laplacian acting on functions has discrete spectrum. Moreover for the Friedrich extension of the Laplace-Beltrami operator we will also provide an estimate for the growth of its eigenvalues. Finally we will give some applications to the Hodge-Dolbeault operator in the setting of Hermitian complex spaces of complex dimension 2.

Orateur: M. BEI, Francesco