

**ON THE CLASSIFICATION OF TOROIDAL
COMPACTIFICATIONS OF COMPLEX HYPERBOLIC
MANIFOLDS**

Speaker: Luca Di Cerbo (ICTP), October 16, 2017

Abstract: In 1984 Hirzebruch constructed the first examples of non-minimal smooth compactifications of complex hyperbolic manifolds. In this talk, I will explain how such examples cannot exist if the dimension of the manifold is greater or equal to three (joint with G. Di Cerbo). Finally, I will discuss how Hirzebruch's example and closely related ball quotients (constructed jointly with M. Stover) are useful in answering a variety of questions in complex surfaces theory and hyperbolic geometry.