

Integral structures on Hodge atoms

Tony Pantev

I will describe a novel formalism for defining and specifying integral structures on the $\bar{t}^*$ -geometries that parametrize massive vacua in $N=2$ QFTs. I will focus a non-archimedean variants of these structures which arises naturally in complex geometry and mirror symmetry and are known as F-bundles and their basic pieces known as Hodge atoms. I will explain a construction of the Gamma-corrected integral structure on the A-model non-archimedean F-bundle and will discuss the special features of the Gamma-conjecture that are important in this setting. This is a report on a joint work in progress with Katzarkov, Kontsevich and Yu