

ON THE HODGE THEORY OF TOROIDAL EMBEDDINGS AND CORRESPONDING VANISHINGS

Speaker: Chuanhao Wei
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Time: Wed., Jun. 26th, 14:00-15:00PM

Venue: Room 106, SCMS

Abstract:

Deligne's logarithmic comparison theorem and the degeneracy of the spectral sequence of logarithmic de Rham complex gives the mixed Hodge structure of a projective smooth variety with a normal crossing boundary divisor. In this talk, we will try to build a similar theory on toroidal embeddings. In particular, we will show the E_1 -degeneracy of the spectral sequence of the logarithmic de Rham complex of any toroidal triple. This gives a geometric proof of a more general version of Danilov's conjecture.