

Harvard-M.I.T. Algebraic Geometry Seminar

HOCHSCHILD STRUCTURES: AN ALGEBRAIC GEOMETER'S POINT OF VIEW

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Although Hochschild homology and cohomology for algebraic varieties and complex manifolds have been studied for some time now, they rose to prominence primarily through the work of Kontsevich on Mirror Symmetry and Deformation Quantization. The techniques he used were primarily differential-geometric. In my talk I will attempt to give a mild introduction to the subject, from an algebraic geometric point of view, hoping to touch on some of the recent results on the Mukai pairing, formality of the Hochschild complex, and connections with topological string theory. I will only assume knowledge of standard results in algebraic geometry and homological algebra.

Tuesday, November 16th, 2004

3:00 p.m.

Harvard Rm 507

<http://www-math.mit.edu/ags/>