Hochschild cohomology as mirror to orbifold cohomology

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Abstract

I shall present work in progress on the development of tools for understanding the Hochschild cohomology ring of Calabi-Yau-like spaces (including orbifolds) and for relating it to Chen-Ruan orbifold cohomology. There is hope that this may lead to a better understanding of the cohomology of Hilbert schemes of points on a K3 surface.