

Harvard-MIT Algebraic Geometry Seminar

A New Approach to Dualizing Complexes

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In the last four years there has arisen a completely new way of looking at dualizing complexes, and we will try to outline the theory. We will begin with a quick review of Grothendieck duality, done classically. Then we will discuss some of the results in the 2005 and 2006 articles by Iyengar, Jorgensen and Krause which began the new approach. Their results were limited to the case of affine schemes; we will explain this, and then show how, using recent work of the speaker and of his student Daniel Murfet, it is possible to also handle the global case.

Tuesday May 19th

3:00 p.m.

Harvard (SC 507)