Seminar

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Categorical Crepant Resolutions via LG models

Tuesday, April 18, 2017

at 11:00 h

ESI, Boltzmann Lecture Hall

Abstract: Desingularizing a variety is, of course, not unique. For example, there can be many crepant resolutions of a given space. However, in their pioneering work on derived categories, Bondal and Orlov conjectured that all such resolutions have equivalent derived categories. In this way, categorically resolving singularities may have some nicer properties that classical resolutions. I will discuss how categorical crepant resolutions can be given explicit geometric realizations as Landau-Ginzburg models. For example, Kuznetsov's categorical crepant resolutions of the K3 category inside a singular cubic 4-fold can be interpreted as a Landau-Ginzburg model.

L. Katzarkov

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