

Exceptional singularities.

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Abstract

Exceptional two-dimensional singularities are singularities of type E_6 , E_7 and E_8 . Exceptional three-dimensional quotient singularities have been classified by Yura Prokhorov and Dima Markushevich. We show how to use the idea of Kollár to prove that exceptional singularities exist in all dimensions. We show how to use the Nadel-Shokurov vanishing with the Kawamata subadjunction to classify exceptional quotient singularities in dimensions 4, 5 and 6.

*joint work with Costya Shramov.