



ODTU-Bilkent Algebraic Geometry

Jets schemes and toric embedded resolution of rtp's

By

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Abstract: One of the aims of J.Nash in an article on the arcs spaces (1968) was to understand resolutions of singularities via the arcs living on the singular variety. He conjectured that there is a one-to-one relation between a family of the irreducible components of the jet schemes of an hypersurface centered at the singular point and the essential divisors on every resolution. J.Fernandez de Bobadilla and M.Pe Pereira (2011) have shown his conjecture, but the proof is not constructive to get the resolution from the arc space. We will construct an embedded toric resolution of singularities of type rtp from the irreducible components of the jet schemes.

This is a joint work with B.Karadeniz, H. Mourtada and C.Plenat.

Date: 9 December 2022, Friday

Time: 15:40 (GMT+3)

Place: Zoom

To request the event link, please send a message to sertoz@bilkent.edu.tr