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Resolution except for minimal singularities I

[Edward Bierstone](), [Pierre D. Milman]()

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The philosophy of the article is that the desingularization invariant together with natural geometric information can be used to compute local normal forms of singularities. The idea is used in two related problems: (1) We give a proof of resolution of singularities of a variety or a divisor, except for simple normal crossings (i.e., which avoids blowing up simple normal crossings, and ends up with a variety or a divisor having only simple normal crossings singularities). (2) For more general normal crossings (in a local analytic or formal sense), such a result does not hold. We find the smallest class of singularities (in low dimension or low codimension) with which we necessarily end up if we avoid blowing up normal crossings singularities. Several of the questions studied were raised by Kollar.

Comments:	41 pages. Minor revisions; results unchanged. Reference added
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