Title: Reduction of singularities of holomorphic maps of $\mathbb{C}^2$ tangent to the identity

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We study the singularities of holomorphic maps of $\mathbb{C}^2$ tangent to the identity. We will adapt the method of Hironaka for the resolution of singularities of algebraic varieties to our study. In particular, we introduce a new numerical invariant associated to such maps at the singularities, called “adapted order”, which behaves well under blow-ups. Though other methods for desingularizing such maps exist, our approach has the advantage that it has no essential obstruction for generalizing to higher dimensions.

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