

DUALITY AND BLOW-UP ALGEBRAS

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We provide a generalization of Jouanolou duality that is applicable to a plethora of situations. The environment where this generalized duality takes place is a new class of rings, that we introduce and call weakly Gorenstein. As a main consequence, we obtain a new general framework to investigate blowup algebras. We use our results to study and determine the defining equations of the Rees algebra of certain families of ideals.

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