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Whitney Liske* (liske.2@nd.edu). *The Rees Algebra for a family of Gorenstein Ideals*. Preliminary report.

Let $R = k[x_1, \dots, x_d]$ be a polynomial ring in d variables over a field k . Let $m = (x_1, \dots, x_d)$ be the maximal homogenous ideal of R . Let I be a Gorenstein ideal generated by all the generators of m^2 except for one. For each fixed d these ideals are all equivalent, up to change of coordinates. The goal is to compute the defining equations of the special fiber ring and the Rees ring of these ideals. A secondary goal is to study the algebraic properties of these blowup algebras. To compute the Rees ring, we study the Jacobian dual and the defining equations of the special fiber ring of m^2 . (Received January 22, 2018)