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Kuei-Nuan Lin*, Department of Mathematics, University of California, Riverside, Riverside, CA 92521, and **Claudia Polini**, Department of Mathematics, University of Notre Dame, Notre Dame, IN 46556. *Rees Algebras of Truncations of Complete Intersections*. Preliminary report.

This is joint work with C. Polini. The Rees algebra of an ideal provides an algebraic realization for the classical notion of blowing up a variety along a subvariety, which is a fundamental operation in algebraic geometry and commutative algebra. Understanding the defining ideal of a Rees algebra is difficult in general. In collaboration with Polini, we treat the case of ideals in a polynomial ring defined by forms of the same degree that arise as truncations of regular sequences of length two. We think of these defining ideals as divisors of normal domains. In this context, we study the Cohen-Macaulayness and regularity of Rees algebras as well. (Received August 25, 2012)