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Uwe Nagel and **Alexandra Seceleanu*** (aseceleanu@unl.edu). *Ordinary and symbolic Rees algebras for a class of special point configurations.*

Fermat configurations are planar point configurations that are closely related to the intersection locus of the members of a specific pencil of curves. The ideals defining these sets of projective points have gained recent popularity as counterexamples to some proposed containments between symbolic and ordinary powers. We study the ordinary and the symbolic Rees algebras of Fermat ideals. Although symbolic Rees algebras can in general be badly behaved, we show that in our case of interest the symbolic Rees algebras of Fermat ideals are Noetherian. Along the way, we give formulas for the Castelnuovo-Mumford regularity of powers of Fermat ideals. (Received February 22, 2016)