

1102-14-157

Alexandra Seceleanu* (aseceleanu@unl.edu). *Configurations of points and lines with interesting algebraic properties.*

Symbolic powers of ideals have long played a significant part in algebraic geometry and in commutative algebra, where containment relations between symbolic powers and ordinary powers have become a focus of interest. This area has seen exciting new developments recently. It had been expected that $I^{(Nr-N1)} \subseteq I^r$ should hold for the ideal I of any finite set of points in \mathbb{P}^N and all $r > 0$, but in the last years various counterexamples to this conjecture have been constructed, many involving point sets arising as intersections of line arrangements in the plane. The talk will give an overview of some interesting algebraic features of these counterexamples. (Received July 29, 2014)