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Paolo Mantero* (pmantero@uark.edu). *Free resolutions of symbolic powers of star configurations.*

Star configurations of points are sets X of points in projective space with strong combinatorial properties. There has been interest in understanding how “fattening” points affects the algebraic properties of these configurations or, in other words, understanding the symbolic powers $I_X^{(m)}$ of their defining ideals I_X .

In this talk we unveil the structure of these ideals $I_X^{(m)}$: we will describe their minimal generating sets and Betti tables. Our results apply to the more general setting of star configuration of hypersurfaces. (Received August 03, 2020)