1159-13-147 **Susan Cooper**, **Sabine El Khoury**, **Sara Faridi**, **Sara Mayes-Tang**, **Susan Morey**, **Liana Şega*** (segal@umkc.edu) and **Sandra Spiroff**. *Cellular resolutions of powers of ideals of projective dimension 1, Part II.*

Let I be a square-free monomial ideal. Its minimal free resolution is known to be supported on a tree G. For any integer $r > 0$, we constructed in Part I of this talk a labelled cellular complex $\overline{G^r}$ and its associated homogenized chain complex, denoted $\mathbb{F}^r$. In this talk we show that $\mathbb{F}^r$ is a minimal free resolution of I^r. Our approach identifies $\mathbb{F}^r$ with a strand of a Koszul complex, and gives a full description of the Rees algebra of I.

Both parts of this talk are part of a project that was started during a "Women in Commutative Algebra" meeting in Banff, which also includes the material to be presented in the following talk in the session "Free Resolutions, Combinatorics, and Geometry":

Morse resolutions of powers of square free monomial ideals of projective dimension 1 (Sara Faridi). (Received August 03, 2020)