

Positroids over $\mathbb{F}_3$

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A positroid is an $\mathbb{R}$ -linear matroid $\mathcal{M}$ together with an ordering on the elements of $\mathcal{M}$ such that there exists a matrix A , that represents $\mathcal{M}$, with all non-negative maximal minors. Postnikov presented a map from matroids to so-called decorated permutations (or, bounded juggling patterns) which is a bijection when restricted to positroids. We showed that each fiber of this map contains at least one graphic $\mathbb{F}_2$ -linear positroid. In this talk, we will focus on characterizing the $\mathbb{F}_3$ -linear positroids.

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