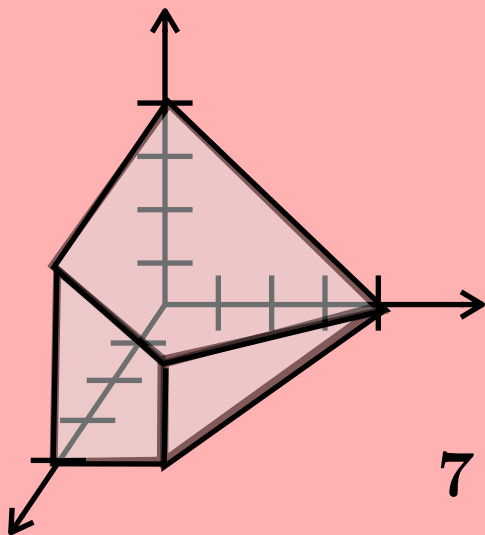


Unipotent polytopes

Nat Thiem

Unipotent polytopes are a family of geometric shapes that arise in a fundamental combinatorial puzzle. Such problems in turn have a linear algebraic interpretation in terms of matrix ranks. This

talk introduces these three perspectives to the same problem and explores some of the open questions I'd like answered.



7

2	3	0	1
4	0	1	2
	4		0
		2	1
			7

$$\begin{bmatrix} \text{Id}_4 & A & D & F \\ 0 & \text{Id}_4 & B & E \\ 0 & 0 & \text{Id}_2 & C \\ 0 & 0 & 0 & \text{Id}_7 \end{bmatrix}$$

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