



Berlin
Mathematical
School

BMS Friday Colloquium

Friday 17 June 2016 at 14:15

Tea & Cookies starting at 13:00

BMS Loft, Urania, An der Urania 17, 10787 Berlin

Bernd Sturmfels

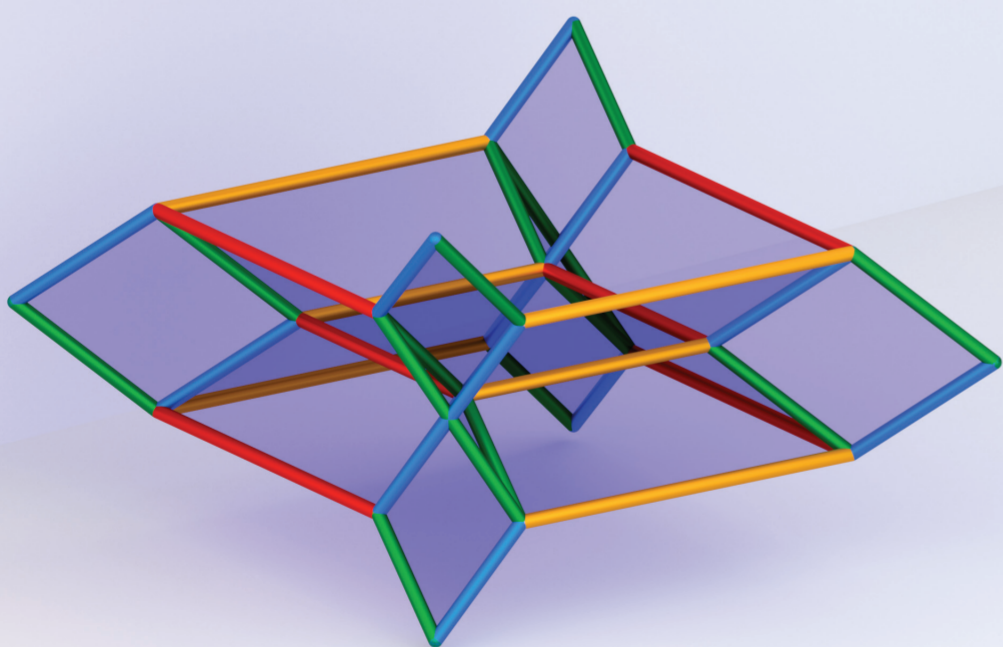
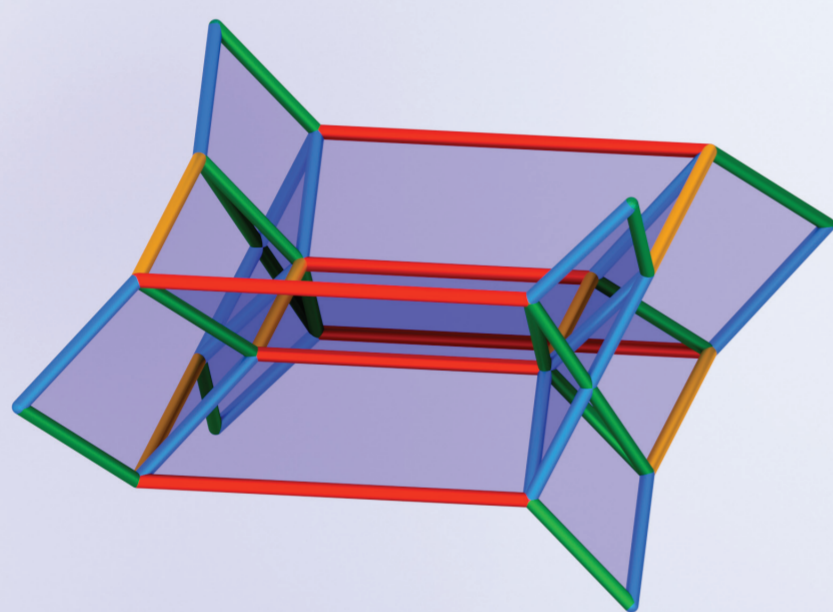
(UC Berkeley)

Tensors and their eigenvectors

Eigenvectors of square matrices are central to linear algebra. Eigenvectors of tensors are a natural generalization. The spectral theory of tensors was pioneered by Lim and Qi a decade ago, and it has found numerous applications.

In his talk, Sturmfels will present an introduction to this theory, focussing on results on eigenconfigurations attributed to Abo, Cartwright, Robeva, Seigal and Sturmfels himself. He will also discuss a count of singular vectors according to Friedland and Ottaviani.

Bernd Sturmfels is a German professor of mathematics, statistics and computer science at UC Berkeley. His current research connects computational algebraic geometry to problems in statistics, optimization and biology. Sturmfels gained his PhD at U Washington, Seattle in 1987 and, after postdoc positions in Minneapolis and Linz, he taught at Cornell before joining UC Berkeley in 1995. Sturmfels served as vice president of the American Mathematical Society from 2008 to 2010, and was awarded an honorary doctorate from Goethe University Frankfurt in 2015. He is currently an Einstein Visiting Fellow at TU Berlin.



© Thilo Rörig