

Hyperplanes: A History

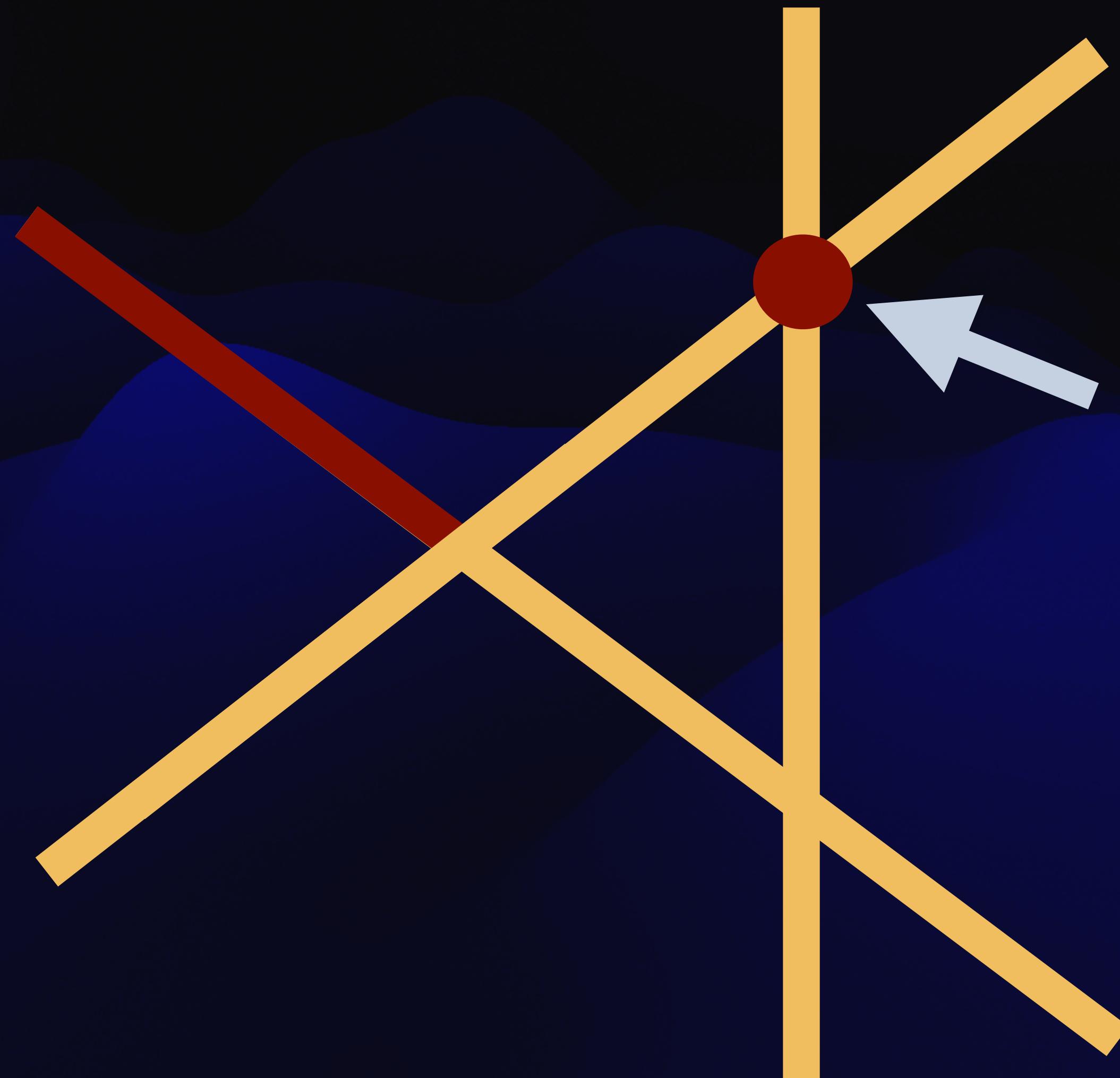
Trevor Karn, SCAS Lightning Talk, September 12, 2024

The Chamber of Arrangements



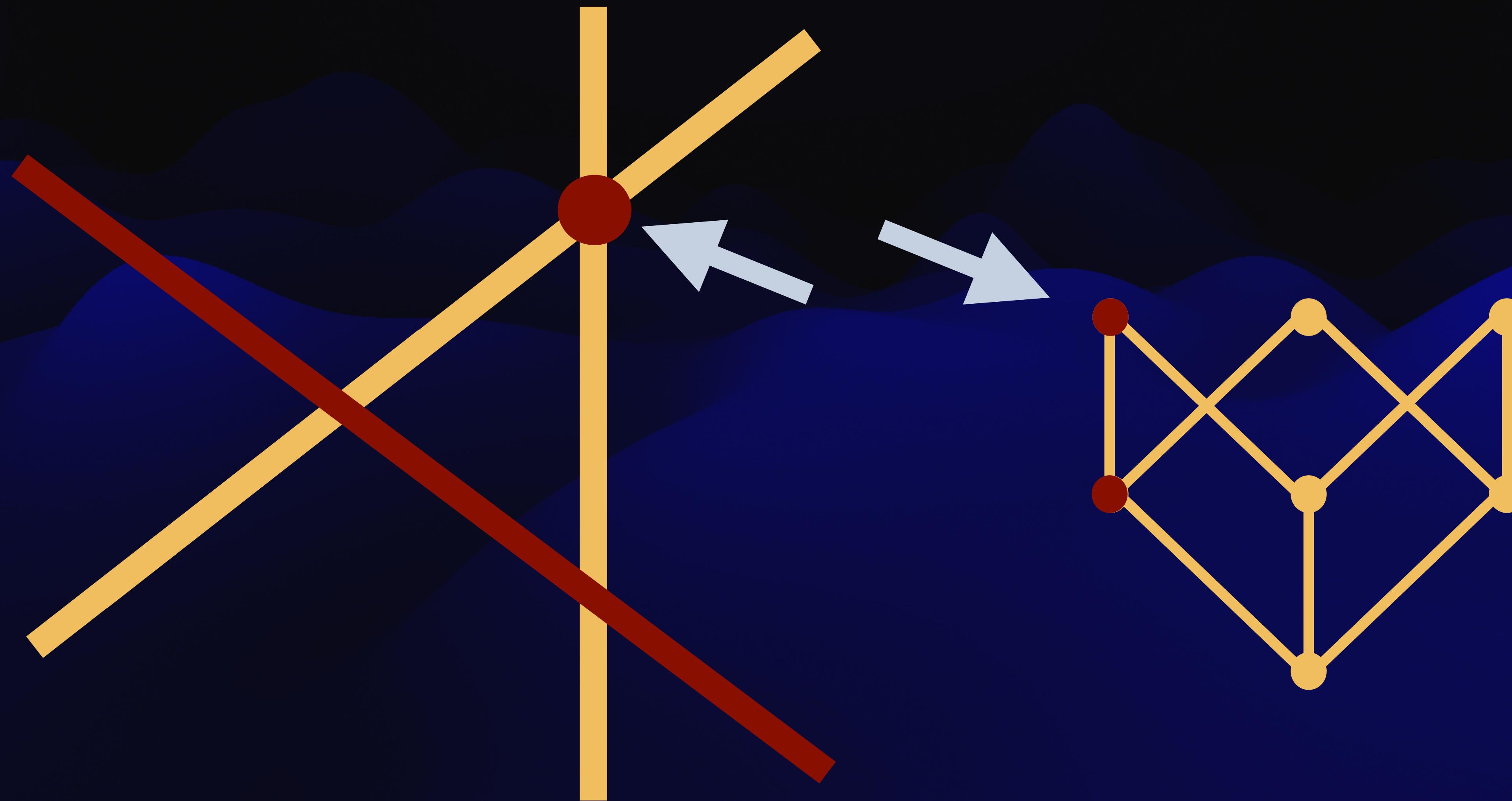
$$1 + n + \binom{n}{2} + \cdots + \binom{n}{d}$$

The Half-Space Prince



Geometry
↔
Combinatorics

The Order of Posets



The Prisoner of Algebra

Orlik–Solomon Algebras

Varchenko–Gelfand Rings

Face Rings

Derivation Modules

Orlik–Terao Algebras