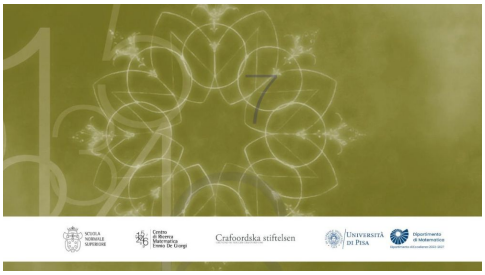

Contribution ID: **9** Type: **not specified**

Vector bundles on polyhedral complexes

Tuesday, 30 September 2025 16:00 (1 hour)

Logarithmic geometry is a language that combines piecewise-linear and algebraic geometry, particularly useful for tracking the combinatorics of compactifications and degenerations of algebraic varieties. Olsson's stack of logarithmic structures, and its charts provided by Artin cones, have played a fundamental role in moduli theory and enumerative geometry. Recent developments concerning stability, good moduli spaces, and logarithmic sheaf theory show the utility of considering Artin fans over a base, or Olsson fans. In joint work with Francesca Carocci and Jonathan Wise, we study their structure and vector bundles over them, generalising the theory of equivariant bundles on toric varieties. If time permits, I will discuss the relationship with Grassmannians and limit linear series that motivated our investigation.

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