ROB SILVERSMITH, University of Warwick *Cross-ratios and perfect matchings*

A collection $\mathcal{T} = \{T_1, T_2, \ldots, T_{n-3}\}$ of 4-element subsets of [n] defines a product of forgetful maps $\mathcal{M}_{0,n} \to (\mathcal{M}_{0,4})^{n-3}$. The degree of this map is a nonnegative integer called the cross-ratio degree $d_{\mathcal{T}}$ of \mathcal{T} . It would be desirable to understand how $d_{\mathcal{T}}$ depends on the combinatorial structure of \mathcal{T} as a hypergraph. I'll discuss several interpretations of cross-ratio degrees in algebra, algebraic geometry, and tropical geometry, and present a perhaps-surprising upper bound for cross-ratio degrees in terms of perfect matchings.