

F-splittings of Geometrically Vertex Decomposable ideals

Lisa Seccia

Université de Neuchâtel

In this talk, we discuss the connection between Frobenius splittings and geometrically vertex decomposable ideals. Motivated by earlier work of Knutson, who showed that certain Frobenius splittings descend to degenerations obtained in a way compatible with the splitting, we show a partial converse to this result. The talk is based on joint work with Emanuela De Negri, Elisa Gorla, Patricia Klein, Jenna Rajchgot, and Mayada Shahada.

In Special Session 56 on Recent Developments in Commutative Algebra at the Mathematical Congress of the Americas 2025.