

Peter Littelmann

Title: Semitoric degenerations via Newton-Okounkov bodies and Standard Monomial Theory.

Abstract: Sequences of Schubert varieties, contained in each other and successively of codimension one, naturally lead to valuations on the field of rational functions of the flag variety. By taking the minimum over all these valuations, one gets a quasi valuation which leads to a semitoric degeneration of the flag variety. We show that this semitoric degeneration is strongly related to the Standard Monomial Theory on flag varieties as originally initiated by Seshadri, Lakshmibai and Musili. This is work in progress jointly with Rocco Chirivì and Xin Fang.