Math Physics Seminar - Charles Wang, University of Michigan, Zoom

Wednesday, Apr 9th 1:30 - 2:30pm

Title: Explicit Landau-Ginzburg models for cominuscule homogeneous spaces

Abstract: While Rietsch has constructed Landau-Ginzburg (LG)models for all partial flag varieties G/P in terms of Lie-theoretic data, it is often desirable to have a further description of these LG models in terms of natural coordinates on these spaces as well. There have been several works which make use of Plucker coordinate descriptions of Rietsch's LG models obtained using heavily type-dependent methods for particular cases such as the Grassmannians Gr (k,n). In this talk, we will present a uniform, type-independent construction of Plucker coordinate LG models for all cominuscule homogeneous spaces. One of our main tools for this is an order-theoretic description of Plucker coordinates which enables us to avoid type-specific arguments.