Department of Mathematics University of Notre Dame

ALGEBRAIC GEOMETRY AND COMMUTATIVE ALGEBRA SEMINAR

Speaker: Fan Qin

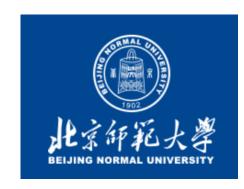
Beijing Normal University

Date: Tuesday, April 16, 2024

Time: 3:30 PM

Location: 258 Hurley Bldg

Zoom URL: NA



Lecture Title:

Analogs of dual canonical bases for cluster algebras from Lie theory

Abstract

The (quantized) coordinate rings of many interesting varieties from Lie theory are (quantum) cluster algebras. We construct the common triangular bases for these algebras. Such bases provide analogs of the dual canonical bases, whose existence has been long expected in cluster theory. For symmetric Cartan matrices, they are positive and admit monoidal categorification after base change.