Representation and Number Theory Seminar

Cluster Algebras and Nakajima's Graded Quiver Varieties

by

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Abstract:

Nakajima's graded quiver varieties are complex algebraic varieties associated with quivers. They are introduced by Nakajima in the study of representations of universal enveloping algebras of Kac-Moody Lie algebras, and can be used to study cluster algebras. In the talk, I will explain how to precisely locate the supports of the triangular basis of skew-symmetric rank 2 quantum cluster algebras by applying the decomposition theorem to various morphisms related to quiver varieties, thus prove a conjecture proposed by Lee-Li-Rupel-Zelevinsky in the skew-symmetric case.

Date : 25 October, 2022 (Tuesday)
Time : 9:00am - 10:00am (Hong Kong SAR)
Zoom link :
https://cuhk.zoom.us/j/97838822137?pwd=ZTVvSC9abmNjR3RCcS9FTzJNTVhXdz09
Meeting ID : 978 3882 2137
Passcode : sesame

All are Welcome