

Northeastern University



Mathematics Department

Geometry, Physics, and Representation Theory Seminar

Mandy Cheung

Harvard University

Thursday, April 19, 2:50-4:00 pm, Lake Hall 509

Quiver representations and theta functions.

Abstract

Scattering diagrams theta functions and broken lines were developed in order to describe toric degenerations of Calabi-Yau varieties and construct mirror pairs. Later, Gross-Hacking-Keel-Kontsevich unravel the relation of those objects with cluster algebras. In the talk, we will discuss how we can combine the representation theory with these objects. We will also see how the broken lines on scattering diagram give a stratification of quiver Grassmannians using this setting.