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Cluster Categories

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Abstract

Cluster Categories are introduced to understand cluster dynamics from the representation theory point of view. The subject has its roots in two important results in the literature that give us a glimpse of a relationship between cluster dynamics and representation theory. The first is that there is an one-to-one correspondence between the cluster variables of a finite type cluster algebra and the almost positive roots of the corresponding root system. The second is a well-known result by Gabriel that classifies finite representation type quivers by using positive roots of the corresponding root system. In this talk, after giving an overview of cluster categories, I will talk about a recent joint work with Charles Paquette on the generalization of discrete cluster categories.

Date : Wednesday, August 12, 2020
Time : 19:00
Place: IMBM Seminar Room, Boğaziçi University South Campus