Quivers, Clusters, Pictures

Friday, February 16, 2018
3:00 p.m. in ES-143
(tea & coffee at 2:30 p.m. in ES-152)

Abstract. In this talk I will describe certain combinatorial structures of generalized associahedra appearing in several apparently unrelated constructions. The combinatorics of general decompositions of quiver representations turns out to be closely related to the Fomin-Zelevinsky theory of cluster algebras and to the Igusa-Orr theory of pictures designed to describe the homology of nilpotent groups of upper-triangular matrices. Departing from the definition of quiver representations and Gabriel theorem, I will define the generalized associahedra and sketch how they appear in the other areas mentioned above.