EMINE YILDIRIM, Université du Québec à Montréal
Associahedra via Quiver Representations

In this talk, we will discuss constructing generalized associahedra based on quiver representations for simply laced Dynkin quivers. Our inspiration comes from the paper Arkani-Hamed, Bai, He, Yan (2017) on scattering forms on the kinematic space. Their construction can be viewed as giving an associahedron associated to the linearly oriented type A quiver. Our approach generalizes this associahedron to all simply-laced Dynkin types. The correctness of our construction is proved using quiver representations. This is a joint work with Véronique Bazier-Matte, Nathan Chapelier, Aram Dermenjian, Guillaume Douville, Kaveh Mousavand, Franco Saliola, Hugh Thomas.