

Math/Phys seminar

Speaker: Elizabeth Kelley, UIUC

Location: Tuesday Febr 20, 1:30-2:30 pm, BRNG 1255

Title: Snake Graphs for Graph LP Algebras

Abstract: Graph LP algebras are a generalization of cluster algebras that were introduced by Lam and Pylyavskyy. In joint work with Esther Banaian, Sunita Chepuri, and Sylvester W Zhang, we provide a combinatorial proof of positivity for certain cluster variables in these algebras. Our proof uses a hypergraph generalization of snake graphs, which were introduced by Musiker, Schiffler, and Williams to prove positivity for cluster algebras from surfaces. In this talk, I will explain our construction without assuming prior knowledge about cluster algebras or snake graphs.