
MILEN YAKIMOV, Northeastern University

Finite generation and representation theory of quantum cluster algebras at roots of unity

We will address two problems on quantum cluster algebras. The first is about transferring finite generation from classical to quantum cluster algebras and back. We will describe an if and only if result, based on techniques from Cayley-Hamilton algebras. The second problem is about the classification of irreducible representations of quantum cluster algebras at roots of unity. We will describe those of maximal dimension, i.e., the so called Azumaya loci. The talk is based on joint works with Shengnan Huang, Thang Le, Greg Muller, Bach Nguyen and Kurt Trampel.