

Title: Skein Algebras and Spherical DAHAs

Abstract: In this talk, I will be discussing my joint work with Peter Samuelson on the skein algebra of the genus 2 surface and its explicit action on the skein module of the genus 2 handlebody. I will describe how this module decomposes over certain subalgebras in terms of polynomial representations of spherical Double Affine Hecke Algebras. I will also relate this to the  $t = q$  specialisation of the genus two spherical Double Affine Hecke Algebra of Arthamonov and Shakirov.