Skeins, characters and trace

Joanna Kania-Bartoszyńska

National Science Foundation, USA jkaniaba@nsf.gov

Session: Knot Theory

We will describe the structure of the Kaufman Bracket Skein Module of a connected sum of $S^1 \times S^2$'s and its relationship to $SL(2,\mathbb{C})$ -characters of the fundamental group. Structure of the skein module of a compact oriented surface with boundary is needed for a skein theoretic construction of a field theory underlying quantum hyperbolic geometry.