Quantum decorated character stacks

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Abstract:

I will discuss a joint work with D. Jordan, I. Le, and G. Schrader, in which we obtain categorical invariants of stratified surfaces. Our construction yields a quantization of the category of quasicoherent sheaves on the moduli stack of local systems on a surface, and uses representation theory of quantum groups and factorization homology. I will also discuss how one can recover Fock-Goncharov quantization of the moduli space of G-local systems from our construction, when G is of type A_1 .