

Vertex operators and elliptic Hall algebras

Éric Vasserot^{*}

vasserot@math.jussieu.fr

The AGT conjecture predicts that some geometrically constructed operators on the cohomology of the Gieseker space should be related to some explicit vertex operators. We'll review these constructions and explain an approach via the representation theory of Elliptic Hall algebras.

^{*}Institut de mathématiques, UPMC, 4, Place Jussieu, 75005 Paris, FRANCE.