

On the virtual class of the moduli of stable r -spin curves

Takuro Mochizuki
Department of Mathematics
Institute for Advanced Study

Abstract

The virtual classes on the moduli stacks of stable r -spin curves was introduced by Witten, based on the analysis due to Seely-Singer, to relate some hierarchy and the intersection theory of the moduli stacks of stable curves. Jarvis-Kimura-Vaintrob formulated some axioms for the classes to obtain a cohomological field theory.

In my talk, I will give a detail to the construction of Witten, and I will show that they satisfy the axioms due to Jarvis-Kimura-Vaintrob.