

On Symmetries of the WDVV Equations

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Abstract:

This talk is based on a joint work with Dingdian Xu [1]. For two solutions of the WDVV equations that are related by two types of symmetries of the equations given by Dubrovin, we show that the associated principal hierarchies of integrable systems are related by certain reciprocal transformation, and the tau functions of the hierarchies are either identical or related by a Legendre transformation. We also consider relationships between the Virasoro constraints and topological deformations of the principal hierarchies.

Reference:

1. Dingdian Xu, Youjin Zhang, On Symmetries of the WDVV Equations, eprint arXiv: 1002.0034