

## Perturbative connection formulas for Heun equations

*Friday, May 27, 2022 11:30 AM (45 minutes)*

The connection problem for Heun equation seeks to relate bases of Frobenius solutions associated to different Fuchsian singularities. In a recent paper 2201.04491 [hep-th], Bonelli, Iossa, Lichtig and Tanzini have proposed a conjecture relating the relevant connection coefficients to classical conformal blocks of the Virasoro algebra. In practical terms, their conjecture allows to compute the connection coefficients in the form of a perturbative expansion in a suitable parameter. I will explain how to derive the corresponding perturbative formulas directly from Heun's equation.

**Primary author:** LISOVYY, Oleg (LMPT, Tours University)

**Presenter:** LISOVYY, Oleg (LMPT, Tours University)