Bologna Workshop on:
CFT AND INTEGRABLE MODELS
and their applications to Quantum Field Theory, Statistical Mechanics and Condensed Matter Physics

Contribution ID: **14** Type: **Plenary Talk**

Correlation functions in Minimal Liouville Gravity from Douglas string equation

Monday, September 15, 2014 10:00 AM (1 hour)

I am going to present some results about (p,q) Minimal Liouville gravity.

It is assumed that the generating function of the correlators in genus zero in Minimal Liouville gravity (MLG) is nothing but logarithm of the Sato tau-function for dispersionless Gefand-Dikii hierarchy with the special initial condition given by Douglas string equation.

Using the connection between MLG and Frobenious manifold structure we get an explicit and useful expression for log Sato tau-function corresponding Douglas string equation in dispersionless limit.

We argue that the MLG correlators are the expansion coefficients of Log tau-function in respect to the new variables connected with KdV variables by a special noliniear “resonance” transformation in such a way that the MLG correlators satisfy to the necessary fusion rules.

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