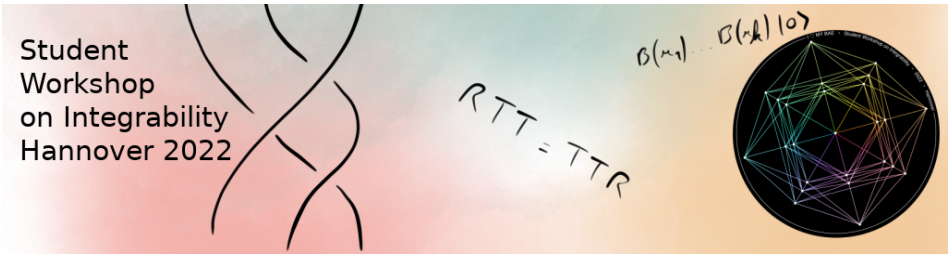

Contribution ID: **19** Type: **20 Min Talk**

Sausage Model and the Generalised Hydrodynamic Formalism

Thursday, 31 March 2022 14:00 (30 minutes)

On this talk we'll review the basic concepts of non-linear sigma models and in particular the one-parameter integrable deformation of the 2d O(3) sigma model.
We'll explore the solutions of this system via thermodynamic bethe ansatz, Y-systems and Dynkin TBA and how to apply this techniques on a Field theory as the one we are dealing with here.
In the second part of this presentation we'll construct a partition protocol with two semi-infinite, disconnected, reservoirs at different temperatures at t_0 that became connected at some later time t that realize non-equilibrium states on the sausage model. We'll discuss the numerical results of this simulation.

Furthermore, the deformed O(3) sigma model exhibits an outstanding characteristic that will be stress during the talk:
its duality with sine-Liouville theory and its interpretation as a 2d black hole.

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Track Classification: Participants Talks: Abstracts of Participants Talks