Workshop on Integrability



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Generalized Hydrodynamics of the staircase model and higher spin currents

Wednesday, 30 March 2022 10:00 (30 minutes)

The staircase model is an integrable modification of the sinh-Gordon model, obtained by complexifying the coupling constant. A key feature of this theory is the fact that the scaling function displays a roaming behaviour, that is, it visits all the unitary minimal conformal models when varying the temperature.

Via the generalized hydrodynamics (GHD) approach to iQFT, we develop a more physical picture of interaction in the theory, both at and away from equilibrium, relating this model to massless flows between consecutive unitary minimal models.

Using this model as a case-study, we also investigate the average currents and densities of higher spin conserved quantities in the partitioning protocol, deriving a universal scaling law which relates the spin to powers of the temperatures of the quenched systems.

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Track Classification: Participants Talks: Abstracts of Participants Talks