

Resurgence in the Bi-Yang-Baxter model

Thursday, 19 December 2019 12:30 (30 minutes)

In this talk, a taster is given of preliminary results obtained with my collaborators. We study the integrable Yang-Baxter deformations of the Principal Chiral Model and its on-shell “uniton” solutions. By dimensionally reducing the theory on the world-sheet we obtain an effective quantum mechanics. Using techniques from resurgence we try to interpret the non-perturbative physics as uniton effects. Moreover, the WKB curve of the quantum mechanics is the same as that of N=2 Seiberg-Witten theory with 4 flavours, which opens doors to a whole range of interesting speculations.

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