

## Scattering on effective strings and membranes

*Tuesday 16 July 2024 12:00 (40 minutes)*

The Nambu-Goto string action can be related to an integrable deformation of a free theory. The scattering of excitations on the two-dimensional worldsheet of the string is then very simple, given by a pure phase. In this talk I will consider the setup of a membrane in flat space. I will analyse the dynamics of excitations on the three-dimensional worldvolume of the membrane, and also compactify the theory on a circle. I will present the perturbative S-matrix, compare with the Nambu-Goto case, and discuss the integrability of the model.

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