Mathematical Physics
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I N V I T A T I O N

as part of the Mathematical Physics Theory Seminar

to the talk by

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on

"Ward Identities in String Theory"

Abstract:

It is well known that string theories are very rich in symmetry contents. I shall focus on massless sector of closed bosonic string. The effective action is known to be invariant under general coordinate transformations and under 'vector' gauge transformation of 2-form potential. For compactified closed string it admits nonabelian gauge invariance associated with massless gauge excitations. These symmetries are not exhibited by the worldsheet action which respects two-dimensional diffeomorphism invariance. I shall show how the abovementioned target space local symmetries can be studied in Hamiltonian formulation of the theory in the worldsheet. There are some shortcomings and I shall propose possible resolutions.

Time: Tuesday, 21 October 2025, 2:00 p.m.

Location: Erwin-Schrödinger Lecture Hall, 1090 Vienna, Boltzmanngasse 5, 5th floor

sgd. S. Fredenhagen, M. Sperling