



Contribution ID: 62

Type: **Oral contribution**

Two-dimensional light-front massless fields and solvable models

Wednesday, 23 September 2015 12:15 (30 minutes)

One of the apparent problems of light front field theory has been a lack of description of two-dimensional massless fields. We show how both the massless scalar and fermion fields can be recovered as massless limits of the two-dimensional massive fields and consistently quantized without any loss of physical information. Bosonization of the light-front (LF) fermion field then follows in a straightforward manner. Solvable models can also be studied directly in the LF formulation. We discuss the operator solution of the Thirring and Thirring-Wess models including the exact (nonperturbative) form of their correlation functions. A few remarks concerning the LF Schwinger model and the LF version of conformal symmetry conclude our contribution.

Primary author: MARTINOVIC, L. (Institute of Physics Slovak Academy of Sciences)

Presenter: MARTINOVIC, L.

Session Classification: 9.