



LUDWIG-
MAXIMILIANS-
UNIVERSITÄT
MÜNCHEN

ARNOLD SOMMERFELD
CENTER FOR THEORETICAL PHYSICS



Sommerfeld Theory Colloquium

Prof. Lars Brink

Chalmers University of Technology

Maximal Supersymmetry, Light-Front Dynamics and Exceptional Symmetries

In this talk I will describe the light-front formulation of maximally supersymmetric theories. This is a formalism where only the physical degrees of freedom is used. This means that the SuperPoincaré invariance is non-linearly realized, a fact we use to build the models. In this formalism the N=4 Yang-Mills and the N=8 Supergravity are treated in a very similar fashion and the close relationship between them is obvious. I will also show that the exceptional symmetry $E_{7(7)}$ is very naturally connected to the N=8 SuperPoincaré algebra. This formalism is an alternative to the ordinary covariant formalisms and is very useful to investigate the UV properties of these models.

Wednesday, 18th November 09, 10:30 h, Room 348 / 349, Theresienstr. 37 / III

Prof. D. Lüst