



LUDWIG-
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MÜNCHEN

ARNOLD SOMMERFELD
CENTER FOR THEORETICAL PHYSICS



Sommerfeld Theory Colloquium

Professor Hermann Nicolai

AEI GoIm

New developments in supermembrane theory

The (unique) maximally extended $D=11$ supermembrane theory stands out as a candidate for the non-perturbative unification of superstring theory. In this talk I will review some basic features, in particular the light-cone gauge reformulation of the theory as the $N \rightarrow \infty$ limit of the maximally supersymmetric $SU(N)$ matrix model, and present new evidence for the existence of the $N \rightarrow \infty$ limit, using a path integral formulation. I will also touch on several open issues, such as the construction of supermembrane vertex operators.

Wednesday, January 11, 2023, 16:15h, Room 348, Theresienstr. 37 / III
and via Zoom

Prof. Slava Mukhanov