



FEZA GÜRSEY
CENTER FOR
PHYSICS AND
MATHEMATICS

*Dual
Perspectives
Meetings*

Recent Developments in Supermembrane Theory

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Abstract:

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.

Date:

Friday, May 12, 2023

Program:

Morning session 10:30-12:00, Afternoon session 13:30-15:00

Location:

Boğaziçi University, Kandilli Campus, Üsküdar-İstanbul