Curved-space classical solution of a massive supermatrix model

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Several matrix models have been proposed as the constructive definition (nonperturbative formulation) of the superstring theory.

We expect matrix models to be a framework to unify the gravitational interaction.



How can we realize the curved-space background?

One approach is · · ·

• We add a mass term so that the model has a curved-space background from the outset.

We follow this approach, and investigate a massive supermatrix model based on osp(1|32,R) super Lie algebra.