

# Supersymmetric solution in dynamical M-brane background

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## ABSTRACT

*The supersymmetry arises in certain theories of fermions coupled to gauge fields and gravity in a spacetime of eleven dimensions [1]. The dynamical brane backgrounds have mainly been studied for the class of purely bosonic solutions only [2, 3, 4], but developments involving time-dependent supersymmetric solution have made it clear that one can get more information by asking what happens on dynamical brane systems [5]. In this presentation, we show an exact supersymmetric solution of dynamical M-brane background in the eleven-dimensional supergravity and consider applications to dynamics of geodesic motion and black hole physics.*

## References

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