



Dynamical solutions in the Nishino-Salam-Sezgin model and its extension

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based on recent work with K. Uzawa, N. Ohta and K. Maeda

Dynamical solutions in higher dimensions

Cosmology

BH / Brane collisions

We consider the 6D theory

$$S = \int d^6x \sqrt{-g} \left[R - (\partial\phi)^2 - e^\phi \Lambda - \frac{1}{12} e^{-2\phi} H_{\mu\nu\rho} H^{\mu\nu\rho} \right]$$

$\Lambda > 0$ Nishino-Salam-Sezgin theory

with vanishing
gauge field strength

$\Lambda < 0$ Romans theory

We study

warped static solutions

dynamical solutions

1-branes

Poster No. 41