

Field localization and mass generation in an alternative 5-dimensional brane model

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We consider a 5-dimensional brane world model with a single brane closely related but distinct from the Randall-Sundrum brane model. In particular we focus on the localization of 5D fields with different spins –spin 0, spin 1/2, spin 1 –to the brane. We find that the brane model studied here has different (and in some cases superior) localization properties for fields/particles with different spins compared to the original 5-dimensional brane models.

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