

Mechanism to control the internal structure of thick brane

Dionísio Bazeia¹, Altemar Lobão^{2,*}

¹UFPB - Brazil

²UFCG - Brazil

In this work, we investigate braneworlds generated by various scalar fields. The research outlines the necessary formalism to analyze models and assess the stability conditions of the gravitational sector under linear perturbations. In particular, we develop a mechanism that assists us in investigating different scenarios controlled by two and three fields, focusing on how these fields can be employed to modify the internal structure of the brane.