XI International Conference on New Frontiers in Physics



Contribution ID: 242

Type: Talk

Wormholes in scalar-tensor theories of modified gravity

We study the possibility to construct a stable wormhole-like solution within scalar-tensor theories of modified gravity of beyond Horndeski type. We pay special attention to the behaviour of perturbations around the wormhole solution in the linearised theory and ensure that there are no pathological degrees of freedom which are able to ruin the solution. In result we suggest a specific example of the beyond Horndeski Lagrangian which admits a heathy wormhole solution and discuss its features.

Is this abstract from experiment?

No

Name of experiment and experimental site

N/A

Is the speaker for that presentation defined?

Yes

Details

Victoria Volkova, INR RAS, Russia http://www.inr.ru/english.html

Internet talk

Yes

Author: VOLKOVA, Victoria

Presenter: VOLKOVA, Victoria

Session Classification: Cosmology, Astrophysics, Gravity, Mathematical Physics

Track Classification: Main topics: Cosmology, Astrophysics, Gravity, Mathematical Physics