Contribution ID: **246**   Type: **Talk**

Wormholes in scalar-tensor theories of modified gravity

Thursday 8 September 2022 16:10 (20 minutes)

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.

Presenter: VOLKOVA, Victoria

Session Classification: High Energy Particle Physics