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## Thin-Shell wormhole in gravity coupled with nonlinear electrodynamics

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In the context of the spontaneously broken scale-invariant nonlinear electrodynamic introduced by Guendlmann et al with a magnetic dominance feature, we construct a thin-shell wormhole. The surface tension of the TSW is zero in static configuration implying the exotic matter present at the throat is a cloud of exotic dust. We apply the small-velocity perturbation as well as the radial linear perturbation to investigate its mechanical stability. In the former case, the equation of state of the fluid on the shell is kept unchanged and upon our calculation the TSW is unstable. For the latter case, we consider a variable equation of state for the dynamic phase of the wormhole and with detailed analysis, it is shown that the TSW may be stable.

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