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Gravitational collapse in General Relativity and in R^2 -gravity: a comparative study. (English)

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MSC:

- 83C75 Space-time singularities, cosmic censorship, etc.
- 83C55 Macroscopic interaction of the gravitational field with matter (hydrodynamics, etc.)
- 76Y05 Quantum hydrodynamics and relativistic hydrodynamics
- 76E20 Stability and instability of geophysical and astrophysical flows
- 81Q05 Closed and approximate solutions to the Schrödinger, Dirac, Klein-Gordon and other equations of quantum mechanics
- 81T10 Model quantum field theories
- 83D05 Relativistic gravitational theories other than Einstein's, including asymmetric field theories
- 83C47 Methods of quantum field theory in general relativity and gravitational theory

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Keywords:

gravitational collapse; modified gravity; vacuum energy; phantom energy; Klein-Gordon equation

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