

Canadian Association of Physicists

Association canadienne des physiciens et physiciennes

Contribution ID: 3624

Type: Oral (Non-Student) / Orale (non-étudiant(e))

First-order thermodynamics of scalar-tensor gravity: recent progress

Thursday 22 June 2023 09:15 (15 minutes)

The field equations of scalsr-tensor and viable" Horndeski gravity can be written as effective Einstein equations with an effective dissipative fluid as a source. It is miraculous that this effective fluid obeys the constitutive relations postulated in Eckart's first-order thermodynamics, allowing one to introduce atemperature of gravity" that describes how alternative gravity approaches, or departs from, Einstein gravity. Recent progress on this first-order thermodynamics will be reviewed.

Keyword-1

emergent gravity

Keyword-2

scalar-tensor thermodynamics

Keyword-3

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Session Classification: (DTP) R1-2 Mathematical and Theoretical Physics | Physique mathématique et théorique (DPT)

Track Classification: Technical Sessions / Sessions techniques: Theoretical Physics / Physique théorique (DTP-DPT)