Contribution ID: **37** Type: **Invited talk in the parallel session**

# Thermodynamics of scalar-tensor gravity: a new approach

*Monday, 5 July 2021 18:00 (20 minutes)*

We propose a new approach to the thermodynamics of scalar-tensor gravity and its possible diffusion" toward general relativity, previously regarded as an equilibrium state in spacetime thermodynamics. The main idea is describing scalar-tensor gravity as an effective dissipative fluid and applying Eckart's first order thermodynamics to it. This gives explicit effective quantities: heat current density,temperature of gravity", viscosity coefficients, entropy density, plus an equation describing the "diffusion" to Einstein gravity. These quantities, otherwise missing in spacetime thermodynamics, pop out with minimal assumptions.

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**Session Classification:** Theories of Gravity: Alternatives to the Cosmological and Particle Standard Models

**Track Classification:** Alternative Theories: Theories of gravity: alternatives to the cosmological and particle standard models