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Analogue Gravitational Dynamics

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Deadline for manuscript submissions:
closed (31 January 2022)

Message from the Guest Editors

Dear Colleagues,

Analogue gravity models provide a powerful test-bed for simulating in condensed-matter systems the propagation of fields on curved spacetime geometries and related phenomena, such as, Hawking radiation, superradiance, and cosmological particle production.
This Special Issue is intended to collect contributions aimed at exploring this side of the analogy, i.e., focusing on condensed-matter systems and emergent analogue gravitational dynamics, both at the “Newtonian” and “relativistic” levels. Topics of interest include (but are not limited to) massive elementary excitations and back-reaction effects, the emergence of Newtonian and Lorentz invariant gravitational interactions, the geometrization of field dynamics, etc. Both research and review papers are welcomed.

Dr. Francesco Marino
Dr. Alessio Belenchia
Guest Editors

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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