

# Hooman Moradpour

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55134-441, Maragha, Iran.**

## **Personal Information:**

- Gender: Male
- Date of birth: 08/14/1985
- Nationality: Iranian
- Marital status: Single

## **Education:**

- 2010-2014: PhD in Astrophysics and Cosmology, Shiraz University
- 2007-2010: M.Sc. in Solid State Physics, Shiraz University
- 2003-2007: B.S. in Physics, Shiraz University

## **Teaching experiences:**

- Advanced Quantum Mechanics
- Gravitation and General Relativity
- Particle Physics
- Quantum Mechanics
- Advanced Statistical Mechanics
- Thermodynamics
- Physics of Electricity & Mechanics
- Classical Electrodynamics

## **Experience in Scientific Society:**

- Member of the editorial board of Journal of High Energy Physics, Gravitation and Cosmology.
- Reviewer:
  - European Physical Journal C
  - Physical Review D
  - Monthly Notices of the Royal Astronomical Society
  - Quantum Information Processing
  - General Relativity and Gravitation
  - The European Physical Journal Plus
  - Modern Physics Letters A
  - Advances in High Energy Physics
  - Chinese Journal of Physics
  - International Journal of Theoretical Physics

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- Gravitation and Cosmology
- Canadian Journal of Physics
- Iranian Journal of Science and Technology Transactions A: Science
- Journal of Research on Many-body Systems

## List of Publications:

- 1) E. Benedetto, F. Feleppa, I. Licata, H. Moradpour and C. Corda: *On the general relativistic framework of the Sagnac effect*, Eur. Phys. J. C 79, 187 (2019).
- 2) H. Moradpour, I. Licata, C. Corda and I. G. Salako: *4-index theory of gravity and its relation with the violation of the energy-momentum conservation law*, Mod. Phys. Lett. A 33, 1950096 (2019).
- 3) M. Abdollahi Zadeh, A. Sheykhi and H. Moradpour: *Tsallis Agegraphic Dark Energy Model*, Mod. Phys. Lett. A 33, 1950096 (2019).
- 4) A. Sheykhi, S. Ghaffari and H. Moradpour: *Ghost Dark Energy in the Deformed Horava-Lifshitz Cosmology*, Int. J. Mod. Phys. D 28, 1950080 (2019).
- 5) M. Younas, A. Jawad, S. Qammar, H. Moradpour and S. Rani: *Cosmological Implications of the Generalized Entropy Based Holographic Dark Energy Models in Dynamical Chern-Simons Modified Gravity*, AHEP, 1287932 (2019).
- 6) S. Ghaffari, H. Moradpour, I. P. Lobo, J. P. Morais Graca and V. B. Bezerra: *Tsallis holographic dark energy in the Brane Cosmology*, Phys. Dark. Univ. 23, 100246 (2019).
- 7) M. Abdollahi Zadeh, A. Sheykhi and H. Moradpour: *Thermal Stability of Tsallis Holographic Dark Energy in Non-falt Universe*, Gen. Relativ. Gravit. 51, 12 (2019).
- 8) K. Bamba, A. Jawad, S. Rafique and H. Moradpour: *Thermodynamics in Rastall Gravity with Entropy Corrections*, Eur. Phys. J. C 78, 986 (2018).
- 9) M. Abdollahi Zadeh, A. Sheykhi, H. Moradpour and K. Bamba: *Note on Tsallis Holographic Dark Energy*, Eur. Phys. J. C 78, 940 (2018).
- 10) A. Jawad and H. Moradpour: *Non-minimal Torsion-matter Coupling and Wormhole Solutions*, Int. Jour. Geom. Meth. Mod. Phys. 15, 1850210 (2018).
- 11) H. Moradpour, S. A. Moosavi, I. P. Lobo, J. P. Morais Graca, A. Jawad and I. G. Salako: *A thermodynamic approach to holographic dark energy and the Renyi entropy*, Eur. Phys. J. C 78, 829 (2018).

- 12) J. P. Morais Graca, Iarley P. Lobo, V. B. Bezerra and H. Moradpour: *Effects of a string cloud on the criticality and efficiency of AdS black holes as heat engines*, Eur. Phys. J. C 78, 823 (2018).
- 13) S. Ghaffari, H. Moradpour, J. P. Morais Graca, I. P. Lobo and Valdir B. Bezerra: *Tsallis holographic dark energy in the Brane cosmology*, Eur. Phys. J. C 78, 706 (2018).
- 14) H. Moradpour, J. P. Morais Graca, I. P. Lobo and I. G. Salako: *Energy Definition and Dark Energy: A Thermodynamic Analysis*, AHEP, 7124730 (2018) [**Featured Article**].
- 15) A. Jawad, T. Nawaz, S. Rani, R. Manzoor and H. Moradpour: *Role of  $f(T, \theta)$  gravity on dynamical instability of collapsing star*, Phys. Dark. Univ. 21, 70 (2018).
- 16) H. Moradpour, A. Sheykhi, C. Corda and I. G. Salako: *Implications of the generalized entropy formalisms on the Newtonian gravity and dynamics*, Phys. Lett. B 783, 82 (2018).
- 17) H. Moradpour, A. Amiri and A. Sheykhi: *Implications of Maximum Acceleration on Dynamics*, Iran. J. Sci. Technol. Trans. Sci. DOI: 10.1007/s40995-018-0569-x (2018).
- 18) M. Tavayef, A. Sheykhi, K. Bamba and H. Moradpour: *Tsallis holographic dark energy*, Phys. Lett. B 781, 195 (2018).
- 19) A. Sayahian Jahromi, S. A. Moosavi, H. Moradpour, J. P. Morais Graca, I. P. Lobo, I. G. Salako and A. Jawad: *Generalized entropy formalism and a new holographic dark energy model*, Phys. Lett. B 780, 21 (2018).
- 20) A. Sheykhi, M. Tavayef and H. Moradpour: *Revisiting Holographic Dark Energy in Cyclic Cosmology*, Can. J. Phys. 96, 1034 (2018).
- 21) I. P. Lobo, H. Moradpour, J. P. Morais Graca and I. G. Salako: *Thermodynamics of Black Holes in Rastall Gravity*, Int. J. Mod. Phys. D 27, 1850069 (2018).
- 22) I. G. Salako, A. Jawad and H. Moradpour: *Anisotropic compact stars in non-conservative theory of gravity*, Int. Jour. Geom. Meth. Mod. Phys. 15, 1850093 (2018).
- 23) F. Darabi, H. Moradpour, I. Licata, Y. Heydarzade and C. Corda: *Einstein and Rastall Theories of Gravitation in Comparison*, Eur. Phys. J. C 78, 25 (2018).
- 24) I. G. Salako, A. Jawad and H. Moradpour: *Cosmological Implications of Scalar Field Dark Energy Models in  $f(T, \mathcal{T})$  gravity*, Int. Jour. Geom. Meth. Mod. Phys. 15, 1850063 (2018).
- 25) A. Sayahian Jahromi and H. Moradpour: *Static traversable wormholes in Lyra manifold*, Int. J. Mod. Phys. D 27, 1850024 (2018).

- 26) H. Moradpour, A. Bonilla, E. M. C. Abreu and J. A. Neto: *Accelerated cosmos in a nonextensive setup*, Phys. Rev. D 96, 123504 (2017).
- 27) R. C. Nunes, H. Moradpour, E. M. Barboza Jr, E. M. C. Abreu and J. A. Neto: *Entropic gravity from noncommutative black holes*, Int. Jour. Geom. Meth. Mod. Phys. 15, 1850004 (2018).
- 28) H. Moradpour, Y. Heydarzade, F. Darabi and I. G. Salako: *A generalization to the Rastall theory and cosmic eras*, Eur. Phys. J. C 77, 259 (2017).
- 29) M. G. Richarte, I. G. Salako, J. P. Morais Graça, H. Moradpour and A. Övgün: *Relativistic Bose-Einstein condensates thin-shell wormholes*, Phys. Rev. D 96, 084022 (2017).
- 30) M. Abdollahi Zadeh, A. Sheykhi and H. Moradpour: *Holographic dark energy with the sign-changeable interaction term*, Int. J. Mod. Phys. D 26, 1750080 (2017).
- 31) M. Bahadoran, H. Moradpour, J. Ali and R. R. Poznanski: *A survey of the new proposal about the photon momentum*, Optik. 139, 6 (2017).
- 32) H. Moradpour, R. C. Nunes, E. M. C. Abreu and J. A. Neto: *A note on the relations between thermodynamics, energy definitions and Friedmann equations*, Mod. Phys. Lett. A 32, 1750078 (2017).
- 33) Y. Heydarzade, H. Moradpour and F. Darabi: *Black Hole Solutions in Rastall Theory*, Can. J. Phys. 95, 1253 (2017).
- 34) H. Moradpour, N. Sadeghnezhad and S. H. Hendi: *Traversable asymptotically flat wormholes in Rastall gravity*, Can. J. Phys. 95, 1257 (2017).
- 35) H. Moradpour, M. Bahadoran, P. Youplao, P. Yupapin and A. Ghasemi: *One and two spin-1/2 particle systems under the Lorentz transformations*, Journal of King Saud University – Science, 30, 560 (2018).
- 36) H. Moradpour, N. Sadeghnezhad, S. Ghaffari and A. Jahan: *Thermodynamic Analysis of Gravitational Field Equations in Lyra Manifold*, AHEP, 9687976 (2017).
- 37) M. Abdollahi Zadeh, A. Sheykhi and H. Moradpour: *Ghost Dark Energy with Sign-changeable Interaction Term*, Int. J. Theor. Phys. 56, 3477 (2017).
- 38) I. Licata, H. Moradpour and C. Corda: *The commutator algebra of covariant derivatives as general framework for extended gravity. The Rastall theory case and the role of the torsion*, Int. Jour. Geom. Meth. Mod. Phys. 14, 1730003 (2017).

- 39) H. Moradpour, A. Abri and H. Ebadi: *Thermodynamic behavior and stability of Polyotropic gas*, Int. J. Mod. Phys. D 25, 1650014 (2016).
- 40) H. Moradpour and M. T. Mohammadi Sabet: *Thermodynamic descriptions of Polyotropic gas and its viscous type as the dark energy candidates*, Can. J. Phys. 94, 1 (2016).
- 41) H. Moradpour: *Thermodynamics of flat FLRW universe in Rastall theory*, Phys. Lett. B 757, 187 (2016).
- 42) H. Moradpour and R. Dehghani: *Thermodynamical Study of FRW Universe in Quasi-Topological Theory*, AHEP. 2016, 7248520 (2016).
- 43) H. Moradpour and A. Montakhab: *Relativistic three-partite non-locality*, Int. J. Quant. Inf. 14, 1650008 (2016).
- 44) H. Moradpour: *Implications, Consequences and Interpretations of Generalized Entropy in the Cosmological Setups*, Int. J. Theo. Phys. 55, 4176 (2016).
- 45) H. Moradpour and I. G. Salako: *Thermodynamic Analysis of the Static Spherically Symmetric Field Equations in Rastall Theory*, AHEP. 2016, 349279 (2016).
- 46) H. Moradpour and S. Nasirimoghadam: *Thermodynamic motivations of spherically symmetric static metrics*, Rom. Journ. Phys. 61, 9 (2016).
- 47) H. Moradpour and N. Riazi: *Dynamic conformal spherically symmetric solutions in an accelerated background*, Rom. Rep. Phys. 68, 4 (2016).
- 48) H. Moradpour and N. Riazi: *Thermodynamic Equilibrium and Rise of Complexity in an Accelerated Universe*, Int. J. Theor. Phys. 55, 268 (2015).
- 49) H. Moradpour and N. Riazi: *Spherically symmetric solutions in a FRW background*, Mod. Phys. Lett. A 30, 1550042 (2015).
- 50) M. Honarvaryan, A. Sheykhi and H. Moradpour: *Thermodynamical description of the ghost dark energy model*, Int. J. Mod. Phys. D 24, 1550048 (2015).
- 51) H. Ebadi and H. Moradpour: *Thermodynamical Description of Modified Generalized Chaplygin Gas Model of Dark Energy*, Int. J. Theor. Phys. 55, 1612 (2015).
- 52) H. Ebadi and H. Moradpour: *Thermodynamics of universe with a varying dark energy component*, Int. J. Mod. Phys. D 24, 1550098 (2015).
- 53) Y. Heydarzade, N. Riazi and H. Moradpour: *Phantom Wormhole Solutions in a Generic Cosmological Constant Background*, Can. J. Phys. 93, 1523 (2015).

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- 54) H. Moradpour, M. T. Mohammadi Sabet and A. Ghasemi: *Thermodynamic analysis of universes with the initial and final de Sitter eras*, Mod. Phys. Lett. A 30, 1550158 (2015).
- 55) H. Moradpour and A. Sheykhi: *From the Komar Mass and Entropic Force Scenarios to the Einstein Field Equations on the Ads Brane*, Int. J. Theor. Phys. 55, 1145 (2015).
- 56) H. Moradpour, S. Maghool and S. A. Moosavi: *Three-particle Bell-like inequalities under Lorentz transformations*, Quantum. Inf. Process 14, 3913 (2015).
- 57) H. Moradpour, A. Dehghani and M. T. Mohammadi Sabet: *Dynamic black holes in an FRW background: Lemaître transformations*, Mod. Phys. Lett. A 30, 1550207 (2015).
- 58) A. Sheykhi, H. Moradpour, K. Rezazadeh Sarab and B. Wang: *Generalized Second Law of Thermodynamics in Parabolic LTB Inhomogeneous Cosmology*, Commun. Theor. Phys. 64, 597 (2015).
- 59) H. Moradpour, A. Sheykhi, N. Riazi and B. Wang: *Necessity of Dark Energy from Thermodynamic Arguments*, AHEP, 2014, 718583 (2014).
- 60) N. Riazi, H. Moradpour and A. Sheykhi: *Conformally Schwarzschild black holes in an accelerating universe*, Int. J. Mod. Phys. D 5, 1450048 (2014).
- 61) N. Riazi, S. Davatolhagh and H. Moradpour: *Evolution of Information and Complexity in an Ever-Expanding Universe*, Iran. J. Astro. Astrophys. 1, 87 (2014).
- 62) A. Sheykhi, H. Moradpour and N. Riazi: *Lovelock gravity from entropic force*, Gen. Relativ. Gravit. 45 (5), 1033 (2013).
- 63) N. Riazi, H. Moradpour and A. Amiri: *Physical and Mathematical Properties of Conformally RW Spacetimes*, Prog. Theo. Phys. 126, 6 (2011).

## Honors:

- Distinguished researcher, RIAAM, Maragha, Iran (2016).

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