



## Mehdi Ghazanfari Mojarrad

Associate Professor

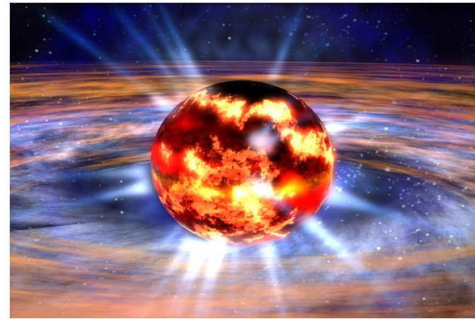
College: faculty of Physics

Department: Nuclear Physics

Mehdi Ghazanfar  
Mojarrad

Department of  
Physics

University of kashan  
P.O.B. 87317-53153  
Tel: +98-31-55912399  
Email: [ghazanfari@kashanu.ac.ir](mailto:ghazanfari@kashanu.ac.ir)  
[ghazanfari1982@gmail.com](mailto:ghazanfari1982@gmail.com)



### Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
Department of physics	Faculty member	Tenured	Full Time	15

### Papers in Conferences

1. با هدف بررسی خواص ماده CPL سیدعلیرضا قائم مقامی، مهدی غضنفری مجرد، محاسبات ابری پیشرفته در آزمایشگاه فوق چگال هسته ای، اولین کنفرانس بین المللی و چهارمین کنفرانس ملی تجهیزات و فناوری های آزمایشگاهی، ۱- تهران، ۲۰۲۳، ۱۱
2. M. Ghazanfari Mojarrad ,Stiffening baryonic equation of state with hyperons ,The Modern Physics of Compact Stars and Relativistic Gravity ,2015.
3. H. R. Moshfegh, M. Darehmoradi, M. Ghazanfari Mojarrad ,Cold Hybrid Star Properties ,AIP Conference Proceedings ,2011.

1. S. A. Ghaemmaghani and M. Ghazanfari Mojarrad, Thermal effects on the baryon–quark phase transition in hot hybrid neutron stars: a statistical mean-field baryonic model with the standard NJL model for deconfined quarks, *European Physical Journal Plus*, Vol. 138, pp. 1, 2023, SCOPUS, JCR.
2. S. A. Ghaemmaghani, M. R. Khoshi and M. Ghazanfari Mojarrad, Influence of a phase-space extension of nuclear forces on the sharp baryon-quark phase transition in hybrid neutron stars, *The European Physical Journal Plus*, Vol. 138, pp. 1, 2023, SCOPUS, JCR.
3. N. S. Razavi and M. Ghazanfari Mojarrad, Hot dense nuclear matter with the Thomas-Fermi approximation, *NUCLEAR PHYSICS A*, Vol. 1029, pp. 122556, 2023, SCOPUS, JCR.
4. S. A. Ghaemmaghani and M. Ghazanfari Mojarrad, A statistical model for the thermodynamic instabilities of asymmetric nuclear matter, *European Physical Journal A*, Vol. 58, pp. 255, 2022, ISI-Listed.
5. J. Ranjbar and M. Ghazanfari Mojarrad, Hybrid neutron stars with the Thomas-Fermi approximation and nonlocal Nambu–Jona-Lasinio model, *Physical Review C*, pp. 045807, 2021.
6. M. Ghazanfari Mojarrad and J. Ranjbar, Thomas–Fermi approximation in the phase transition of neutron star matter from  $\beta$ -stable nuclear matter to quark matter, *Annals of Physics*, Vol. 412, pp. 168048, 2020, JCR.
7. M. Ghazanfari Mojarrad and J. Ranjbar, Hybrid neutron stars in the Thomas-Fermi theory, *Physical Review C*, Vol. 100, pp. 158041, 2019, JCR.
8. M. Ghazanfari Mojarrad and M. S. Fatemi, Symmetry energy and symmetry free energy of asymmetric nuclear matter in the Thomas-Fermi Approximation, *Journal of Research on Many-body Systems*, Vol. 9, pp. 124, 2019.
9. M. Ghazanfari Mojarrad, & N.S. Razavi, Proto-neutron stars in the Thomas-Fermi theory, *Nucl. Phys. A*, Vol. 986, No. 3, pp. 113, 2019.
10. M. Ghazanfari Mojarrad, N. S. Razavi and S. Vaezzade, Thomas–Fermi approximation for  $\beta$ -stable nuclear matter in the Landau Fermi-liquid theory, *Nucl. Phys. A*, Vol. 980, pp. 51, 2018, ISI.
11. M. Ghazanfari Mojarrad and S. K. Mousavi Khoroshtomi, Thomas–Fermi approximation for the equation of state of nuclear matter: A semi-classical approach from the Landau Fermi-Liquid theory, *INT. J. MOD. PHYS. E*, 2017, ISI.
12. M. Ghazanfari Mojarrad and Mahdokht Minaee Bidgoli, Explicit form of the nucleonic chemical potential in nuclear matter on the basis of Thomas-Fermi approximation, *Journal of Research on Many-body Systems*, Vol. 7, pp. 153, 2017, ISC.
13. M. Ghazanfari Mojarrad and R. Arabsaeyidi, Hyperon-rich matter in a two-solar-mass neutron star within the Thomas-Fermi approximation, *INT. J. MOD. PHYS. E*, 2016, ISI.
14. M. Ghazanfari Mojarrad, S. K. Mousavi Khoreshdami, A. Mostajeran, Thomas-Fermi calculations for determination of critical properties of symmetric nuclear matter on the basis of extended effective mass approach, *Iranian Journal of Physics Research*, Vol. 16, pp. 207, 2016, ISC.
15. H. R. Moshfegh and M. Ghazanfari Mojarrad, Strange baryonic matter in the Thomas-Fermi theory, *Eur. Phys. J. A*, Vol. 49, pp. 1, 2013, ISI.
16. H. R. Moshfegh and M. Ghazanfari Mojarrad, Thermal properties of baryonic matter, *J. Phys. G*, Vol. 38, pp. 085102, 2011, ISI.