Personal Information



Name: Rooholah Gholami

Date and place of birth February 20, 1979- Ilam Iran

Nationality Iranian

Known Languages: Persian (Native language)

Kurdish (Mother Tongue),

English (intermediate)

Family status Married
Sex: Male
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Education

- ✓ **PhD in Condensed matter Physics,** 2018. Razi University , http://www.razi.ac.ir, Kermanshah , Iran
  - ✔ Supervisor: Prof. Rostam Moradian
  - ✔ Total GPA: 19.08 out of 20.

- ✔ **Master of Science in Astrophysics,** 2004- 2006. Zanjan University , http://www.znu.ac.ir/en,/ Zanjan, Iran
  - ✔ Supervisor: Prof. Saadollah Nasiri Ghaidari
  - ✔ Total GPA: 17.39 out of 20.

- ✔ **Bachelor of Physics,** 1999-2004. Shahid Beheshti University, http://sbu.ac.ir/, Tehran, Iran.
  Total GPA: 14.17 out of 20.
- ✔ **High School Diploma in Mathematics and Physic**,1998**,** Bagher-aloloom Gifted and Talented High School, Ilam, Iran,

Employment

- ✓ **2006-2008:** Lecturer at Ilam university, Ilam, Iran
- ✓ **2008- 2012**: Member of the Scientific Staff, Ilam University,Ilam Iran
- ✓ **2012-2016:** PhD Student, Physics Department, Razi University, Krmanshah Iran
- ✓ **2016-2017** visitor PhD student at University of California, Davis
- ✓ **2017-2018:** PhD Student, Physics Department, Razi University, Krmanshah Iran
- ✓ **2018-present** Member of the Scientific Staff, Ilam University,Ilam Iran

Teaching Experience

- General physics I,II,III &IV Ilam University, Ilam, Iran
- Thermodynamics I , II Ilam University, Ilam, Iran
- Electromagnetism I, II, Ilam University, Ilam, Iran,
- Fundamental of statistical and thermal physics , Ilam University, Ilam, Iran,
- Mathematical methods for physicists I, II, Ilam University, Ilam, Iran,
- Quantum mechanics I , II Ilam University, Ilam, Iran
- Classical mechanics I , II Ilam University,Ilam, Iran
- Fundamentals of nanophysics
- Advanced statistical and thermal physics , Ilam University, Ilam, Iran,

Selected Graduate Courses

- ✓ Many-body quantum theory in condensed matter physics I, II
- ✓ Advanced condensed matter physics I
- ✓ Advanced quantum mechanics I, II
- ✓ Advanced classical mechanics I,II
- ✓ Special topics in condensed matter physics

Scientific activity

Publications:

- ✓ **R Gholami**, R Moradian, S Moradian, WE Pickett: Superconducting Phases in Lithium Decorated Graphene LiC 6 Nature publishing group, Scientific reports 8 (1), 13795 (2018)
- ✓ **R Gholami**, R Moradian, S Moradian, WE Pickett: Superconducting Phases of Calsium intercalated bilayer graphene (preprint 2023)
- ✓ R Moradian, S Moradian , **R. Gholami** Comment on: Locally self-consistent embedding approach for disordered electronic systems arXiv preprint arXiv:1911.02553
- ✓ **R Gholami**, Graphene Boron Nitride electronic structure in the framework of Realistic Tight binding Model Journal of Research on Many-body Systems 12 (1), 51-65 (2022)
- ✓ M Seidi, H Sabri, **R Gholami** Solution of Bohr Hamiltonian in the Z (5) critical point by using Morse potential for 190Hg nucleus Journal of Nuclear Science and Technology (JonSat) 43 (2), 61-70 (2022)

Conference proceeding:

- ✓ **R.Gholami,** *Superconductivity in AA-Bilayer graphene* **,** The 15th Condensed Matter Conference of the Iranian Physics Society (2020)
- ✓ **R. Gholami**, S. Nasiri :Investigation of physical properties of White dwarfs in Extended Quantum Phase space, The 11thResearch Meeting on Astronomy (February2007),Ghazvin,Iran
- ✓ **R. Gholami**, S. Nasiri:Quantum correction to thermal equilibrium in canonical ensemble using extended phase space method, The annual physics conference of Iran)August 2007(Yasooj,Iran
- ✓ N. Shabani, I. Almasi, **R. gholami**: Transformation of the Fredholm integral equation of first kind to the Volterra integral equation of second kind,40th Annual Iranian Mathematics Conference ,Sharif University)July 2008(, Tehran Iran
- ✓ **R. Gholami**, S. Nasiri: Thermal properties of dense stars associated with degenerate electron gas ,2nd Astronomy &Astrophysics Conference Astronomy (February 2010) , Ahvaz, Iran
- ✓ **R. Gholami**, S. Nasiri: Kirkwood Expansion of Quantum partition function in Canonical ensemble, The annual physics conference of Iran (August 2012)
- ✓ **R.Gholami** *Quantum partition function for a system of fermions- bosons particles contain in harmonic oscillator potential in canonical ensemble*

Academic Experiences & Current Projects

- Advanced Research on "**Thermal properties of White dwarfs using Extended Quantum phase space method**". (Msc. Thesis, 2006).
- Advanced Research on **''Review of Semi-Classical approaches in physics: Wigner-Kirkwood and Quantum Extended phase space''**.(Ilam University Research projects,2008 **)**
- Advanced Research on "**Superconductivity in Monolayer intercalated Graphene** ".
- Advanced Research on**" Disordered alloys systems in the normal and superconductivity phases"**.

RESEARCH INTERESTS

- ✓ Disordered alloys systems in the normal and superconductivity phases
- ✓ Unconventional Superconductivity in Cuperates, Graphene possessing d-wave or p-wave pairing symmetry
- ✓ Strongly correlated systems including superconductivity and magnetism

References:

- **Prof. Rostam Moradian**

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