Asst. Prof. AHMET KELEŞ

Personal Information

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Education Information

Doctorate, University of Washington, College of Arts & Sciences, Department of Physics, United States Of America 2009 - 2014
Post Graduate, Ihsan Dogramaci Bilkent University, Faculty Of Scıence, Department Of Physıcs, Turkey 2007 - 2009
Under Graduate, Ihsan Dogramaci Bilkent University, Faculty Of Scıence, Department Of Physıcs, Turkey 2002 - 2007

Dissertations

Doctorate, Transport properties of chiral p-wave superconductor-normal metal nanostructures, University of Washington, College of Arts & Sciences, Department of Physics, 2014
Post Graduate, Rotating two leg Bose Hubbard ladder, Ihsan Dogramaci Bilkent University, Faculty Of Scıence, Department Of Physıcs, 2009

Research Areas

Atomic and Molecular Interactions, Quantum fluids and solids, Transport Phenomena in Condensed Matter, Electronic structure of bulk material, Magnetic Properties and Materials, Superconductivity, Electronic transport in condensed matter

Academic Titles / Tasks

Assistant Professor, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Physics, 2020 - Continues
Researcher, The University of Pittsburgh, 2014 - 2019
Researcher, George Mason University, 2014 - 2019
Research Assistant, University of Washington, Collage of Arts and Science, Department of Physics, 2009 - 2014
Research Assistant, Ihsan Dogramaci Bilkent University, Faculty Of Scıence, Department Of Physıcs, 2007 - 2009

Courses

General Physics, Under Graduate, 2020 - 2021

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

I. **f-wave superfluidity from repulsive interaction in Rydberg-dressed Fermi gas**
Keles A., Zhao E., Li X.
PHYSICAL REVIEW A, vol.101, no.2, 2020 (Journal Indexed in SCI)

II. **Scrambling dynamics and many-body chaos in a random dipolar spin model**
Keles A., Zhao E., Liu W. V.
PHYSICAL REVIEW A, vol.99, no.5, 2019 (Journal Indexed in SCI)

III. **Weyl nodes in periodic structures of superconductors and spin-active materials**
Keles A., Zhao E.
PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY A-MATHEMATICAL PHYSICAL AND ENGINEERING SCIENCES, vol.376, no.2125, 2018 (Journal Indexed in SCI)

IV. **Renormalization group analysis of dipolar Heisenberg model on square lattice**
Keles A., Zhao E.
PHYSICAL REVIEW B, vol.97, no.24, 2018 (Journal Indexed in SCI)

V. **Absence of Long-Range Order in a Triangular Spin System with Dipolar Interactions**
Keles A., Zhao E.
PHYSICAL REVIEW LETTERS, vol.120, no.18, 2018 (Journal Indexed in SCI)

VI. **Effective theory of interacting fermions in shaken square optical lattices**
Keles A., Zhao E., Liu W. V.
PHYSICAL REVIEW A, vol.95, no.6, 2017 (Journal Indexed in SCI)

VII. **Competing many-body instabilities in two-dimensional dipolar Fermi gases**
Keles A., Zhao E.
PHYSICAL REVIEW A, vol.94, no.3, 2016 (Journal Indexed in SCI)

VIII. **Mott transition in a two-leg Bose-Hubbard ladder under an artificial magnetic field**
Keles A., Oktel M. O.
PHYSICAL REVIEW A, vol.91, no.1, 2015 (Journal Indexed in SCI)

IX. **Theory of disordered unconventional superconductors**
Keles A., Andreev A. V. , Spivak B. Z. , Kivelson S. A.
JOURNAL OF EXPERIMENTAL AND THEORETICAL PHYSICS, vol.119, no.6, pp.1109-1114, 2014 (Journal Indexed in SCI)

X. **Vortex lattices in dipolar two-component Bose-Einstein condensates**
Ghazanfari N., Keles A., Oktel M. O.
PHYSICAL REVIEW A, vol.89, no.2, 2014 (Journal Indexed in SCI)

XI. **Electron transport in p-wave superconductor-normal metal junctions**
Keles A., Andreev A. V. , Spivak B. Z.
PHYSICAL REVIEW B, vol.89, no.1, 2014 (Journal Indexed in SCI)

XII. **Ground-state properties, vortices, and collective excitations in a two-dimensional Bose-Einstein condensate with gravitylike interatornic attraction**
Keles A., Sevincli S., Tanatar B.
PHYSICAL REVIEW A, vol.77, no.5, 2008 (Journal Indexed in SCI)

XIII. **Ground-state properties and collective excitations in a 2D Bose-Einstein condensate with gravity-like interatomic attraction**
Keles A., Sevincli S., Tanatar B.
JOURNAL OF LOW TEMPERATURE PHYSICS, vol.150, pp.630-635, 2008 (Journal Indexed in SCI)

Scientific Refereeing

PHYSICAL REVIEW LETTERS, SCI Journal, October 2018
PHYSICAL REVIEW LETTERS, SCI Journal, September 2018

Citations

Total Citations (WOS):66
h-index (WOS):4