Muhammad Umar Farooq

Professor

College of Electrical & Mechanical Engineering

Email: mumar.farooq@ceme.nust.edu.pk
Contact: 0514420114
LinkedIn:

About

Dr. Muhammad Umar Farooq is working as Professor in the College of Electrical & Mechanical Engineering. Dr. Muhammad Umar Farooq has a PhD in Applied Mathematics. Dr. Muhammad Umar Farooq has published 31 research articles & conference papers having a citation count of 644, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Applied Mathematics   2005 - 2011
  NUST, Islamabad , Pakistan

MSc in Mathematics   2000 - 2002
  BZU, Multan , Pakistan

BS in Mathematics   1986 - 2000
  Islamia University of Bahawalpur , Pakistan

Experience

Professor   2022- Present
  College of Electrical & Mechanical Engineering

Associate Professor   2019 - 2022
  College of Electrical & Mechanical Engineering

Assistant Professor   2016 - 2019
  College of Electrical & Mechanical Engineering

Assistant Professor   2011 - 2016
  College of Electrical & Mechanical Engineering

Post Doc   2016 - 2017
  University of Science & Technology, USTC, China , University of Science & Technology, Hefei, Anhui, China

Lecturer   2003 - 2005
  Islamabad Model College for Boys , F-8/4 Sector, Islamabad, Pakistan

Research Articles

Conserved quantities of Euler-Lagrange system via complex Lagrangian   2023

Muhammad Umar Farooq Anum Naseem C. Wafo Soh

Heliyon , Volume:9, Issue:6, Article Number:

Impact Factor: 4.0 | **Quartile:** 2
DOI: 10.1016/j.heliyon.2023.e17059

Aspects of Homogeneous Heterogeneous Reactions for Nanofluid Flow Over a Riga Surface in the   2022
Presence of Viscous Dissipation

Anum Naseem Anum Shafiq Faiza Naseem Muhammad Umar Farooq

Energies , Volume 15, Issue 19, Article Number 6891

Impact Factor: 3.252 | **Quartile:** 3 | **Citations:** 7
DOI: https://doi.org/10.3390/en15196891

Epicyclic oscillations of test particles near marginally stable circular orbits around charged Kiselev   2021
black holes

Dmitriy Ovchinnikov Muhammad Umar Farooq Ibrar Hussain Ahmadjon Abdujabbarov Bobomurat Ahmedov Zden?k Stuchlík

Physical Review D , Volume 104, Article Number 063027

Discrete Gradient Methods for Solving SIRI Epidemic Model Numerically While Preserving First Integrals 2020

Farrukh Shehzad Yousaf Habib Atia Rashid Muhammad Umar Farooq

Arabian Journal of Science and Engineering, Pages 1-13

Accretion on High Derivative Asymptotically Safe Black Holes 2020

Mubasher Jamil Ayyesha K. Ahmad Mubasher Jamil Ayyesha K. Ahmad M. Umar Farooq Rong-Jia Yang

Chinese Physics C , Vol. 44, No. 6, Article Number 065102

First Integrals of Two-Dimensional Dynamical Systems via Complex Lagrangian Approach 2019

Muhammad Umar Farooq Chaudry Masood Khalique Fazal M. Mahomed

Symmetry , Volume 11, Issue 10

Spherical accretion flows onto modified Schwarzschild black hole 2019

M. Umar Farooq Anum Naseem

Astrophysics and Space Science , Volume 364, Issue 10

Comparison of Noether Symmetries and First Integrals of Two-Dimensional Systems of Second Order Ordinary Differential Equations by Real and Complex Methods 2019

Muhammad Safdar Asghar Qadir Asghar Qadir Muhammad Umar Farooq

Symmetry , Volume 11, Issue 9

Noether-Like Operators and First Integrals for Generalized Systems of Lane-Emden Equations 2019

Muhammad Umar Farooq

Symmetry , Volume: 11 Issue: 2 Article Number: 162

A Complex Lie-Symmetry Approach to Calculate First Integrals and Their Numerical Preservation 2019

Wajeeha Irshad Yousaf Habib Muhammad Umar Farooq

Symmetry , Volume: 11 Issue: 1 Article Number: 11

Analytical investigation of third grade nanofluidic flow over a riga plate using Cattaneo-Christov model 2018

Anum Naseem Anum Shafiq Lifeng Zhao Muhammad Umar Farooq

Results in Physics , NULL

Reconstruction of f(T) and f(R) gravity according to (m,n)-type holographic dark energy 2013

Mubasher Jamil Davood Momeni Ratbay Myrzakulov Muhammad Umar Farooq

Canadian Journal of Physics, Volume 91, Issue 9, Pages 703-708

Non-equilibrium thermodynamics of dark energy on the power-law entropy corrected apparent horizon 2011

Mubasher Jamil Muhammad Umar Farooq

Canadian Journal of Physics, Volume 89, Pages 1251–1254

Dynamics of interacting phantom and quitessence dark energies 2011

Mubasher Jamil Ujjal Debnath Muhammad Umar Farooq

Astrophysics Space Science , Volume 334, Issue 2, Pages 243-248

Impact Factor: 1.686 | **Quartile:** 2 | **Citations:** 37
DOI: 10.1007/s10509-011-0721-y

Thermodynamics of phantom energy in the presence of a Reissner-Nordstrom black hole
2011

Mubasher Jamil Ibrar Hussain Muhammad Umar Farooq

Astrophysics and Space Science , Volume: 335 Issue: 2 Pages: 339-343

Impact Factor: 1.686 | **Quartile:** 2 | **Citations:** 15
DOI: 10.1007/s10509-011-0762-2

Invariants of two-dimensional systems via complex Lagrangians with applications
2011

Sajid Ali Asghar Qadir Muhammad umar Farooq

Commun Nonlinear Sci Numer Simulat , Volume: 16 Issue: 4 Pages: 1804-1810

Impact Factor: 2.806 | **Quartile:** 1 | **Citations:** 13
DOI: 10.1016/j.cnsns.2010.08.007

Two-dimensional Systems that Arise from the Noether Classification of Lagrangians on the Line
2011

Muhammad Umar Farooq Sajid Ali F.M. Mahomed

Applied Mathematics and Computation , Volume: 217 Issue: 16 Pages: 6959-6973

Impact Factor: 1.317 | **Quartile:** 1 | **Citations:** 10
DOI: 10.1016/j.amc.2011.01.104

Interacting Holographic Dark Energy with Logarithmic Correction
2011

M. Umar Farooq Mubasher Jamil

Journal of Cosmology and Astroparticle Physics, Issue: 3 Article Number: 001

Impact Factor: 5.723 | **Quartile:** 1 | **Citations:** 79
DOI: 10.1088/1475-7516/2010/03/001

Integration of Systems of ODEs Via Nonlocal Symmetry-like Operators
2010

Muneer Ahmad Rashid F. M. Mahomed Muhammad Umar Farooq

Mathematical and Computational Applications , Volume: 15 Issue: 4 Pages: 585-600 Special Issue: SI

Impact Factor: N/A | **Citations:** 3
DOI: doi.org/10.3390/mca15040585

Interacting entropy-corrected new agegraphic tachyon, K-essence and dilaton scalar field models of dark energy in non-flat universe
2010

Muhammad Umar Farooq Mubasher Jamil Muneer Ahmad Rashid

International Journal of Theoretical Physics, Volume 49, Issue 9, Pages 2278-2287

Impact Factor: 0.670 | **Quartile:** 3 | **Citations:** 47
DOI: 10.1007/s10773-010-0415-1

Thermodynamics of interacting entropy-corrected holographic dark energy in a non-flat FRW universe
2010

Muhammad Umar Farooq Mubasher Jamil AHMAD SHEYKHI

International Journal of Modern Physics D , Volume: 19 Issue: 11 Pages: 1831-1842

Impact Factor: 1.109 | **Quartile:** 3 | **Citations:** 42
DOI: 10.1142/S0218271810018116

Interacting entropy-corrected holographic Chaplygin gas model
2010

Muhammad Umar Farooq Mubasher Jamil M. A. Rashid

International Journal of Theoretical Physics, Volume: 49 Issue: 10 Pages: 2334-2347

Impact Factor: 0.67 | **Quartile:** 3 | **Citations:** 15
DOI: 10.1007/s10773-010-0420-4

Phantom wormholes in (2+1)-dimensions
2010

Muhammad Umar Farooq Mubasher Jamil

INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS , Volume: 49 Issue: 4 Pages: 835-841

Impact Factor: 0.67 | **Quartile:** 3 | **Citations:** 50
DOI: 10.1007/s10773-010-0263-z

Interacting holographic viscous dark energy model
2010

Muhammad Umar Farooq Mubasher Jamil

International Journal of Theoretical Physics, Volume: 49 Issue: 1 Pages: 42-50

Impact Factor: 0.67 | **Quartile:** 3 | **Citations:** 58
DOI: 10.1007/s10773-009-0176-x

Generalized holographic dark energy model   2009

Muhammad Umar Farooq Mubasher Jamil M. A. Rashid

European Physical Journal C , Volume: 61 Issue: 3 Pages: 471-476

Wormholes supported by phantom-like modified Chaplygin gas   2009

Muhammad Umar Farooq Mubasher Jamil M. A. Rashid

European physical journal C , Volume: 59 Issue: 4 Pages: 907-912

Gravitational Collapse of Radiation Fluid in Higher Dimensions   2009

Muhammad Umar Farooq Mubasher Jamil

IL Nuovo Cimento Della Societa italiana Di Fisica B-Basic Topics in physics B. , Volume: 124 Issue: 9 Pages: 895-904

Conference Proceedings

A Lecture Centric Automated Distractor Generation for Post-Graduate Software Engineering Courses   2022

Rudeema Chughtai Farooque Azam Dr Wasi Haider Butt Dr Umar Farooq Muhammad Waseem Anwar

2022 International Conference on Frontiers of Information Technology, FIT 2022, res.country(177,)

Analysis of Multimodal Representation Learning Across Medical Images and Reports Using Multiple Vision and Language Pre-Trained Models   2022

Ahmad Hassan Mehreen Sirshar Muhammad Usman Akram Muhammad Umar Farooq

2022 19th International Bhurban Conference on Applied Sciences and Technology (IBCAST), res.country(282,)

Dynamics and Thermodynamics of (2+1)-Dimensional Evolving Lorentzian Wormhole   2010

M. Umar Farooq Muhammad Akbar Mubasher Jamil

3rd Algerian Workshop on Astronomy and Astrophysics, res.country(62,)