Safia Taj

Assistant Professor

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About

Dr. Safia Taj is working as Assistant Professor in the College of Electrical & Mechanical Engineering. Dr. Safia Taj has a PhD in Black Holes Tharmodynamics. Dr. Safia Taj has published 23 research articles & conference papers having a citation count of 289, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Black Holes Tharmodynamics 2005 - 2011
NUST, Islamabad , Pakistan

MSc in Mathematics 2002 - 2004
University of the Punjab , Pakistan

BSc in Mathematics 2000 - 2002
University of the Punjab , Pakistan

Experience

Assistant Professor 2012- Present
College of Electrical & Mechanical Engineering

Research Articles

Lie-symmetry analysis of a three dimensional flow due to unsteady stretching of a flat surface with non-uniform temperature distribution 2025
Ghani Khan Muhammad Safdar Safia Taj Adnan Munir Muhammad Tauseef Nasir
Alexandria Engineering Journal, Volume 112, January 2025, Pages 424-435
Impact Factor: 6.200 | **Quartile:** 1 | **Citations:** 1
DOI: https://doi.org/10.1016/j.aej.2024.10.121

Generalised Lie similarity transformations for the unsteady flow and heat transfer under the influence of internal heating and thermal radiation 2023
Muhammad Safdar Safia Taj Muhammad Bilal Shoaib Ahmed Shuguang Li M Ijaz Khan Maimona Rafiq Sherzod Shukhratovich Abdullaev
Pramana-Journal of Physics, Volume:97, Issue:4, Article Number: 203,
Impact Factor: 2.8 | **Quartile:** 2 | **Citations:** 43
DOI: 10.1007/s12043-023-02672-4

Comparative analysis of analytical and numerical approximations for the flow and heat transfer in mixed convection stagnation point flow of Casson fluid 2023
M. Tanzeel-ur-Rehman Siddiqi Muhammad Safdar Hina Muneer Dutt Safia Taj M. Ijaz Khan Barno Sayfutdinovna Abdullaeva Reem Altuijri Ahmed M. Hassan
Results in Physics, Volume 52, Article Number 106819
Impact Factor: 5.3 | **Quartile:** 1 | **Citations:** 3
DOI: https://doi.org/10.1016/j.rinp.2023.106819

Heat transfer in MHD thin film flow with concentration using lie point symmetry approach 2023
Muhammad Safdar Safia Taj Riaz Ahmad Khan Ghani Khan Ilyas khan Sayed M Eldin Reham A. Alahmadi
Case Studies in Thermal Engineering, Volume 49, Article Number 103238
Impact Factor: 6.8 | **Quartile:** 1 | **Citations:** 17
DOI: https://doi.org/10.1016/j.csite.2023.103238

Analytical Solutions for Unsteady Thin Film Flow with Internal Heating and Radiation 2023
Ahsan Ali Naseer Muhammad Safdar Safia Taj Muhammad Umair Ali Amad Zafar Kwang Su Kim Jong Hyuk Byun
Journal of Mathematics, Volume 2023 | Article ID 5612023

Impact Factor: 1.555 | **Quartile:** 1 | **Citations:** 1
DOI: 10.1155/2023/5612023

Multiple Lie symmetry solutions for effects of viscous on magnetohydrodynamic flow and heat transfer in non-Newtonian thin film 2023

Muhammad Safdar Safia Taj Muhammad Bilal Shoaib Ahmed Muhammad Ijaz Khan Sana Ben Moussa Bandar M. Fadhl Basim M. Makhdoum Sayed M. Eldin

Open Physics, Volume 21, Issue 1, Pages 1-14

Impact Factor: 1.361 | **Quartile:** 3 | **Citations:** 5
DOI: https://doi.org/10.1515/phys-2022-0244

Lie symmetry and exact homotopic solutions of a non-linear double-diffusion problem 2023

Dr Riaz Ahmad Khan Dr Safia Taj Shoaib Ahmed Ilyas Khan Sayed M. Eldin

Frontiers in Physics, Vol:11, Pages:10

Impact Factor: 3.718 | **Quartile:** 2 | **Citations:** 2
DOI: 10.3389/fphy.2023.1150176

Reduce-Order Modeling and Higher Order Numerical Solutions for Unsteady Flow and Heat Transfer in Boundary Layer with Internal Heating 2022

Muhammad Safdar Safia Taj Amad Zafar Muhammad Umair Ali Seung Won Lee Muhammad Bilal

Mathematics , Volume 10, Issue 24, Article Number 4640

Impact Factor: 2.4 | **Quartile:** 1 | **Citations:** 4
DOI: https://doi.org/10.3390/ math10244640

One-dimensional optimal system of Lie sub-algebra and analytic solutions for a liquid film fluid flow 2022

Fuzhang Wang Muhammad Safdar Bisma Jamil Muhammad Ijaz Khan Safia Taj M.Y. Malik A.S. Alqahtani Ahmed M. Galal

Chinese Journal of Physics, Volume 78, Pages 220-223

Impact Factor: 5.00 | **Quartile:** 1 | **Citations:** 8
DOI: 10.1016/j.cjph.2022.03.050

Lie symmetry analysis of heat transfer in a liquid film over an unsteady stretching surface with viscous dissipation and external magnetic field 2022

Safia Taj Muhammad Ijaz Khan Muhammad Safdar Samia Elattar Ahmed M. Galal

Waves in Random and Complex Media, Pages 1-16

Impact Factor: 4.853 | **Quartile:** 1 | **Citations:** 1
DOI: 10.1080/17455030.2022.2085346

Analytic solutions for the MHD flow and heat transfer in a thin liquid film over an unsteady stretching surface with Lie symmetry and homotopy analysis method 2022

Muhammad Safdar Muhammad Ijaz Khan Riaz Ahmed Khan Safia Taj Faizan Abbas Samia Elattar Ahmed M. Galal

Waves in Random and Complex Media, Pages 1-19

Impact Factor: 4.051 | **Quartile:** 2 | **Citations:** 14
DOI: https://doi.org/10.1080/17455030.2022.2073402

Construction of similarity transformations and analytic solutions for a liquid film on an unsteady stretching sheet using lie point symmetries 2021

Muhammad Safdar M. Ijaz Khan Safia Taj M.Y. Malik Qiu-Hong Shi

Chaos, Solitons and fractals , Volume 150, Article Number 111115

Impact Factor: 9.922 | **Quartile:** 1 | **Citations:** 19
DOI: https://doi.org/10.1016/j.chaos.2021.111115

On the ensemble dependence in black hole geometrothermodynamics 2014

Hernando Quevedo María N Quevedo Alberto Sanches Safia Taj

Physica Scripta , Volume: 89, Issue: 8, Article Number: 084007

Impact Factor: 1.126 | **Quartile:** 3 | **Citations:** 11
DOI: 10.1088/0031-8949/89/8/084007

Geometrothermodynamics of five dimensional black holes in Einstein-Gauss-Bonnet theory 2012

Safia Taj Hernando Quevedo Alberto Sanches

General Relativity and Gravitation , Volume: 44 Issue: 6 Pages: 1489-1523

Impact Factor: 1.902 | **Quartile:** 1 | **Citations:** 11
DOI: 10.1007/s10714-012-1351-6

Thermodynamic geometry of charged rotating BTZ black holes 2011

M Akbar H. Quevedo K. Saifullah A. Sa´nchez Safia Taj

Physical Review D , Volume: 83 Issue: 8 Article Number: 084031

Impact Factor: 4.558 | **Quartile:** 1 | **Citations:** 62

DOI: 10.1103/PhysRevD.83.084031

Phase transitions in geometrothermodynamics 2011

Hernando Quevedo Alberto Sánchez Safia Taj Alejandro Vázquez

General Relativity and Gravitation , Volume: 43 Issue: 4 Pages: 1153-1165

Impact Factor: 2.069 | **Quartile:** 1 | **Citations:** 74

DOI: 10.1007/s10714-010-0996-2

Thermodynamics of topological black holes in Ho˘rava–Lifshitz gravity 2011

Hernando Quevedo Alberto Sánchez Safia Taj

Journal of Physics A-Mathematical and Theoretical, -

Impact Factor: 1.564 | **Quartile:** 2 | **Citations:** 3

DOI: 10.1088/1742-6596/354/1/012015

Curvature as a measure of the thermodynamic interaction 2010

Hernando Quevedo Alberto Sánchez Safia Taj Alejandro Vázquez

Journal of the Korean Physical Society, Vol. 57, No. 3, Pages 646-650

Impact Factor: 0.478 | **Quartile:** 4 | **Citations:** 7

DOI: 10.3938/jkps.57.646

Conference Proceedings

Lie point algebraic classification of linear third order ODEs using differential invariants 2018

Muhammad Safdar safia Taj Rubina Rauf

THE INTERNATIONAL CONFERENCE ON MATHEMATICAL SCIENCES AND TECHNOLOGY 2018 (MATHTECH2018), res.country(157,)

Citations: N/A

DOI: 10.1063/1.5136497

Differential Invariants For Nonlinear Third Order Evolution Type Partial Differential Equations 2018

Muhammad Safdar safia Taj

INTERNATIONAL CONFERENCE ON MATHEMATICAL SCIENCES AND TECHNOLOGY 2018 (MATHTECH2018), res.country(157,)

Citations: N/A

DOI: 10.1063/1.5136498

Semi Invariants for Linear Third Order Evolution Equation 2018

Muhammad Safdar Riaz A. Khan Safia Taj

16th International Conference of Numerical Analysis and Applied Mathematics, res.country(88,)

Citations: N/A

DOI: 10.1063/1.5114180

On Differential Invariants of A Class of Generalized Diffusion Equations 2018

Muhammad Safdar Riaz A. Khan safia Taj

International Conference on Numerical Analysis and Applied Mathematics (ICNAAM-2018), res.country(88,)

Citations: N/A

DOI: 10.1063/1.5114179

Thermodynamics of topological black holes in Hořava–Lifshitz gravity 2011

Hernando Quevedo Alberto S´anchez Safia Taj

3rd Italian–Pakistani Workshop on Relativistic Astrophysics (IPWRA2011), res.country(109,)

Citations: 3

DOI: 10.1088/1742-6596/354/1/012015

Editorial Activities

Heliyon 2024
Reviewed Papers for Journals
Impact Factor: 3.4

Ain Shams Engineering Journal 2024
Reviewed Papers for Journals
Impact Factor: 6

Journal of Advances in Mathematics and Computer Science 2023
Reviewed Papers for Journals
Impact Factor: N/A

International Journal of Theoretical Physics 2023
Reviewed Papers for Journals
Impact Factor: 1.4

Symmetry 2023
Reviewed Papers for Journals
Impact Factor: 2.7

Symmetry 2023
Reviewed Papers for Journals
Impact Factor: 2.7

Symmetry-Basel 2022
Reviewed Papers for Journals
Impact Factor: 2.940

Symmetry-Basel 2022
Reviewed Papers for Journals
Impact Factor: 2.940

Symmetry-Basel 2022
Reviewed Papers for Journals
Impact Factor: 2.940