Tooba Siddiqui

Professor

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About

Dr. Tooba Siddiqui is working as Professor in the School of Natural Sciences. Dr. Tooba Siddiqui has a PhD in Mathematics. Dr. Tooba Siddiqui has published 52 research articles & conference papers having a citation count of 554, carried out 1 projects and filed 0 intellectual property.

Qualifications

PhD in Mathematics Quaid-i-Azam University , Pakistan	1999 - 2006
MPhil in Mathematics Quaid-i-Azam University , Pakistan	1997 - 1999
MSc in Mathematics University of the Punjab , Pakistan	1994 - 1997
BSc in Mathematics University of the Punjab , Pakistan	1991 - 1994
Experience	
Professor School of Natural Sciences	2017- Present
Associate Professor	2014 - 2014
School of Natural Sciences	
Associate Professor School of Natural Sciences	2012 - 2014
Associate Professor School of Natural Sciences	2012 - 2012
Assistant Professor School of Natural Sciences	2007 - 2012
Research Associate National university of Sciences and Technology , National university of Sciences and Technology, H-12, Islamabad	2006 - 2007
Visiting Researcher Linkoping University, Sweden , Linkoping University, Sweden	2005 - 2006
Research Associate Centre for Advanced Mathematic, National university of Sciences and Technology, National university of Sciences and Technology, H-12	2005 - 2005 , Islamabad
Lecturer NUCES (FAST) , National University of Computer and Emerging Sciences, H-11, Islamabad	2004 - 2005

Awards

School Best Teacher Award	2019
School Best Teacher Award for the year 2016-17	

School Best Teacher Award 2014

School Best Teacher Award for the year 2012-13

RPA

Research Productivity Award by Ministry of Science and Technology

Research Projects

National Projects

Hole Metric

Some Applications of Discrete Symmetry Analysis of Differential Equations Funding Agency: HEC Amount: PKR 780,000.00 Status: Completed	2019
International Projects	
Research Articles	
Karmarkar Bardeen anisotropic model for compact stars in F(R,T) gravity Tooba Siddiqui Furqan Nazeer Astrophysics and Space Science, Volume 370, Article Number 33 Impact Factor: 1.800 Quartile: 3 DOI: https://doi.org/10.1007/s10509-025-04423-w	2025
Perturbed conformal invariance and Mei adiabatic invariants of the generalized perturbed Hamiltonian systems with additional terms Haseeb Ur Rehman Tooba Siddiqui Studies in Applied Mathematics, Volume 153, Issue 4, Article Number e12766 Impact Factor: 2.600 Quartile: 1 DOI: https://doi.org/10.1111/sapm.12766	2024
Exact solutions based on Segre classification in the f(R) modified theory of gravity Wardah Aroosh Afzal Tooba Siddiqui European Physical Journal C, Volume:84, Issue:3, Pages:16 Impact Factor: 4.4 Quartile: 2 Citations: 3 DOI: 10.1140/epjc/s10052-024-12617-9	2024
Perturbation to conformal invariance and adiabatic invariants of generalized perturbed Hamiltonian system with additional terms Haseeb Ur Rehman Tooba Siddiqui Physica D: Nonlinear Phenomena, Volume 458, Article Number: 134010 Impact Factor: 4.0 Quartile: 1 Citations: 1 DOI: 10.1016/j.physd.2023.134010	2024
A generalized polytropic equation of state stellar model with anisotropic charged fluid Wardah Aroosh Afzal Tooba Siddiqui Astrophysics and Space Science, Volume 369, Article Number 11, Pages: 17 Impact Factor: 1.9 Quartile: 3 Citations: 1 DOI: 10.1007/s10509-024-04273-y	2024
Classification of Painlev´e Type Equations by the Mei Symmetries and their Exact Solutions Haseeb Ur Rehman Tooba Siddiqui Physica Scripta, Volume 98, Number 12, Article Number 125251 Impact Factor: 2.9 Quartile: 2 DOI: 10.1088/1402-4896/ad0d6a	2023
First order approximate conserved quantities induced by the approximate symmetries of the perturbed Lagrangian Haseeb Ur Rehman Tooba Siddiqui Physics Letters A, Volume 480, Article Number 128984 Impact Factor: 2.6 Quartile: 3 Citations: 2 DOI: https://doi.org/10.1016/j.physleta.2023.128984	2023
Approximate Mei symmetries of pp-wave spacetimes Umara Kausar Tooba Siddiqui Physica Scripta, Volume 98, Number 8, Article Number 085220 Impact Factor: 2.9 Quartile: 2 Citations: 1 DOI: 10.1088/1402-4896/ace486	2023
The Mei Symmetries for the Lagrangian Corresponding to the Schwarzschild Metric and the Kerr Black	2022

Kınza ittiknar Nimra Sher Asgnar 1000a Siddiqui	
Symmetry, Volume 14(10), Article Number 2079	
Impact Factor: 2.7 Quartile: 2 Citations: 1	
DOI: https://doi.org/10.3390/ sym14102079	
Effects of the external magnetic field on the Lense–Thirring precession	2022
Muhammad Rizwan Tooba Siddiqui	
International Journal of Modern Physics D, Volume 31, No. 3, Article Number 2250012 (15 pages)	
Impact Factor: 2.461 Quartile: 2 Citations: 1 DOI: 10.1142/S0218271822500122	
A systematic approach to find solutions of the Einstein-Maxwell field equations for static spherically	2022
symmetric spacetimes using Segre classification	
Aneela Iram Azad Akhter Siddiqui Tooba Feroze International Journal of Modern Physics D, Volume 31, No. 11, Article Number 2240006	
Impact Factor: 2.547 Quartile: 3 Citations: 2	
DOI: https://doi.org/10.1142/S0218271822400065	
First-Order Approximate Mei Symmetries and Invariants of the Lagrangian	2022
Umara Kausar Tooba Siddiqui	
Mathermatics , Volume 10(4), Article Number 649	
Impact Factor: 2.258 Quartile: 1 Citations: 5 DOI: https://doi.org/10.3390/math10040649	
Optimal System and Exact Solutions of Monge-Ampere Equation	2021
Tooba Mohsin Umair	
Communications in Mathematics and Applications, Volume 12(4), Pages 825-833	
Impact Factor: N/A DOI: https://doi.org/10.26713/cma.v12i4.1516	
Approximate Mei Symmetries and Invariants of the Hamiltonian	2021
Umara Kausar Tooba Siddiqui	
Mathermatics , Volume 9(22), Article Number 2910	
Impact Factor: 2.258 Quartile: 1 Citations: 5 DOI: https://doi.org/10.3390/math9222910	
Symmetries and Exact Solutions of Some Partial Differential Equations	2021
Syed Tahir-ul-Husnain Tooba Feroze	
International Journal of Mechanics and Applications, Volume 10(2), Pages 27-29	
Impact Factor: - DOI: DOI: 10.5923/j.mechanics.20211002.01	
Discrete Symmetry Transformations of Third Order Ordinary Differential Equations and Applications	2020
Khudija Bibi Tooba Feroze	
WSEAS Transactions on Mathematics, Volume 19, Pages 503-509	
Impact Factor: - Citations: 1 DOI: DOI: 10.37394/23206.2020.19.54	
Discrete Symmetry Group Approach for Numerical Solution of the Heat Equation	2020
Khudija Bibi Tooba Feroze Khudija Bibi	
Symmetry , Volume 12, Article Number 359	
Impact Factor: 2.713 Quartile: 2 Citations: 8 DOI: 10.3390/sym12030359	
Optimal systems and their group invariants solutions to geodesic equations	2019
Muhammad Safdar Bismah Jamil Tooba Feroze	
International Journal of Geometric Methods in Modern Physics, Volume 16, Issue 9, Article Number 1950135	
Impact Factor: 1.287 Quartile: 3 Citations: 2 DOI: 10.1142/S0219887819501354	
Exact solutions of Zabolotskaya?Khokhlov equation using optimal system	2018
Tooba Feroze Mohsin Umair	
International Journal Of Geometric Methods In Modern Physics, Vol. 15 (2018) (8 pages)	

Impact Factor: 1.022 | Quartile: 3 DOI: 10.1142/S0219887818501116

On Spherically Symmetric Solutions of the Einstein-Maxwell Field Equations 2017 Tooba Feroze Azad Akhter Siddiqui Rashida Bibi General Letters in Mathematics, Vol. 3, No. 3, Dec 2017, pp.164-168 Impact Factor: N/A DOI: http://www.refaad.com/views/GLM/333.html Gravitational wave-type spacetime with cylindrical symmetry 2017 Farhad Ali Tooba Siddigui Theoretical and Mathematical Physics, Volume 193(2), Pages 1703-1714 Impact Factor: 0.851 | Quartile: 3 | Citations: 9 **DOI:** DOI: https://doi.org/10.1134/S0040577917110101 Non-Static Spherically Symmetric Exact Solution of the Einstein-Maxwell Field Equations 2017 Ayesha Mahmood Azad Akhter Siddiqui Tooba Feroze Journal of the Korean Physical Society, NULL Impact Factor: 0.493 | Quartile: 4 | Citations: 3 DOI: doi:https://doi.org/10.3938/jkps.71.396 2017 Geometrical/Physical Interpretation of the Conserved Quantities Corresponding to Noether Symmetries of Plane Symmetric Space-Times Bismah Jamil Andres Vargas TOOBA SIDDIQUI Advances in Mathematical Physics, 40 pages Article Number: 4384093 Impact Factor: 0.71 | Quartile: 4 | Citations: 5 DOI: 10.1155/2017/4384093 A Class of Non-Static Exact Solutions of the Einstein-Maxwell Field Equations 2017 Ayesha Mehmood Azad Akhtar Siddiqui TOOBA SIDDIQUI International Journal of Modern Physics D, International Journal of Modern Physics D Vol. 26, No. 5 (2017) 1741008 (12 pages) Impact Factor: 2.171 | Quartile: 2 DOI: 10.1142/S0218271817410085 Conservation laws corresponding to the Noether symmetries of the geodetic Lagrangian in spherically 2017 symmetric spacetimes Bismah Jamil TOOBA SIDDIQUI International Journal of Modern Physics D, INTERNATIONAL JOURNAL OF MODERN PHYSICS D Volume: 26 Issue: 5 Special Issue: SI Article Number: 1741006 Impact Factor: 2.171 | Quartile: 2 | Citations: 6 DOI: 10.1142/S0218271817410061 A class of nonstatic exact solutions of the Einstein-Maxwell field equations 2017 Ayesha Mahmood Azad Akhtar Siddiqui Tooba Feroze International Journal of Modern Physics D, Volume: 26 Issue: 5 Special Issue: SI Article Number: 1741008 Impact Factor: 2.171 | Quartile: 2 **DOI:** http://dx.doi.org/10.1142/S0218271817410085 Cylindrically symmetric gravitational-wavelike space-times 2017 Fahad Ali Tooba Siddiqui Theoretical and Mathematical Physics, Volume 193, Number 2, Pages 343-355 Impact Factor: 0.851 | Quartile: 3 DOI: DOI: https://doi.org/10.4213/tmf9148 Complete Classification of Cylindrically Symmetric Static Spacetimes and the Corresponding 2016 Conservation Laws Farhad Ali Tooba Feroze Mathematics, Volume: 4, Issue: 3, Article Number: UNSP 50 Impact Factor: 0 | Citations: 25 DOI: 10.3390/math4030050 Solution of the Einstein-Maxwell equations with anisotropic negative pressure as a potential model of a 2016 dark energy star Rashida Bibi Tooba Feroze Azad Akhter Siddiqui Canadian Journal of Physics, Volume: 94 Issue: 8 Pages: 758-762 Impact Factor: 0.877 | Quartile: 3 | Citations: 7 DOI: 10.1139/cjp-2016-0069

Charged analogue of Vlasenko?Pronin superdense star with variable cosmological term	2016
Ghazala Nazeer TOOBA SIDDIQUI	
PRAMANA-Journal of Physics, PRAMANA-Journal of Physics, pp. 789–800, Vol. 86, No. 4	
Impact Factor: 0.520 Quartile: 4 DOI: 10.1007/s12043-015-1085-6	
Approximate Noether symmetries from geodetic Lagrangian for plane symmetric spacetimes Farhad Ali Tooba Feroze	2015
International Journal of Geometric Methods in Modern Physics, Volume: 12, Issue: 10, Article Number: 1550124	
Impact Factor: 0.769 Quartile: 4 Citations: 14 DOI: 10.1142/S0219887815501248	
Comments on "Classification of Spherically Symmetric Static Spacetimes by Noether Symmetries, Int J Theor Phys 52, (2013) 3534–3542"	2015
Tooba Feroze International Journal of Theoretical Physics, INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS Volume: 54 Issue: 10 Pages: 3500-3502	
Impact Factor: 1.041 Quartile: 3	
DOI: 10.1007/s10773-015-2590-6	
Complete classification of spherically symmetric static space-times via Noether symmetries Farhad Ali Tooba Feroze Sajid Ali	2015
Theoretical and Mathematical Physics, Volume 184, Issue 1, Pages 973-985	
Impact Factor: 0.831 Quartile: 3 Citations: 27 DOI: DOI:10.1007/s11232-015-0310-2	
The Classification of Spherically Symmetric Static Spacetimes via Noether Symmetries Farhad Ali Tooba Siddiqui Sajid Ali	2015
Theoretical and Mathematical Physics, Volume 184(1), Pages 973-985	
Impact Factor: 0.831 Quartile: 3 DOI: 10.1007/s10773-015-2590-6	
Exact Solutions of the Einstein Equations with polytropic Equations of State Tooba Feroze Hadia Tariq	2015
Canadian Journal of Physics, Volume 93(6), Pages 637-640	
Impact Factor: 0.724 Quartile: 3 Citations: 6	
DOI: doi:10.1139/cjp-2014-0362	
Exact Solutions of the Einstein-Maxwell Equations with Polytropic Equations of State Hadia Tariq TOOBA SIDDIQUI	2015
Canadian Journal of Physics, Canadian Journal of Physics, volume 93, pages 637–640	
Impact Factor: 0.724 Quartile: 3 Citations: 6 DOI: https://doi.org/10.1139/cjp-2014-0362	
Some exact solutions of the Einstein-Maxwell equations with a quadratic equation of state AZAD AKHTER SIDDIQUI TOOBA SIDDIQUI	2014
Journal of the Korean Physical Society, JOURNAL OF THE KOREAN PHYSICAL SOCIETY Volume: 65 Issue: 6 Pages: 944-947 Special Issue: SI	
Impact Factor: 0.418 Quartile: 4 Citations: 16 DOI: 10.3938/jkps.65.944	
Some Exact Solutions of the Einstein-Maxwell Equation with Quadratic Equation of State	2014
Tooba Feroze Azad Akhtar Siddiqui	
Journal of Korean Physical Society, Volume: 65 Issue: 6 Pages: 944-947 Special Issue: SI Impact Factor: 0.418 Quartile: 4 Citations: 16	
DOI: 10.3938/jkps.65.944	
Comments on Modeling Dynamical Interactions between Leptospirosis Infected Vector and Human Population [Applied Mathematical Sciences, 6 (2012), 1287-1302] TOOBA SIDDIQUI	2014
Applied Mathematical Sciences, Vol. 8, No.112, Pages 5565-5568	
Impact Factor: 0	
DOI: http://dx.doi.org/10.12988/ams.2014.45344	
Noether symmetries and conserved quantities for spaces with a section of zero curvature (vol 61, pg 658, 2011)	2014
Farhad Ali Tooba Feroze	

Journal of Geometry and Physics, Volume: 80, Pages: 88-89 Impact Factor: 0.806 | Quartile: 2 | Citations: 6 DOI: 10.1016/j.geomphys.2014.02.005 The Classification of Plane Symmetric Static Spacetimes According to their Noether Symmetries 2013 Farhad Ali TOOBA SIDDIQUI International Journal of Theoretical Physics, International Journal of Theoretical Physics, pages 3329-3342 Impact Factor: 1.186 | Quartile: 3 | Citations: 40 DOI: 10.1007/s10773-013-1630-3 2011 Comments on revisiting the classical electron model in general relativity Azad Akhter Siddiqui Tooba Feroze Astrophysics and Space Science, Volume: 335 Issue: 2 Pages: 337-337 Impact Factor: 1.686 | Quartile: 2 DOI: 10.1007/s10509-011-0785-8 Charged anisotropic matter with quadratic equation of state 2011 TOOBA SIDDIQUI AZAD AKHTER SIDDIQUI General Relativity and Gravitation, GENERAL RELATIVITY AND GRAVITATION Volume: 43 Issue: 4 Pages: 1025-1035 Impact Factor: 2.069 | Quartile: 1 | Citations: 121 DOI: 10.1007/s10714-010-1121-2 Noether symmetries and conserved quantities for spaces with a section of zero curvature 2011 Ibrar Hussain Tooba Feroze Journal of Geometry and Physics, Volume 61, Issue 3, Pages 658-662 Impact Factor: 0.818 | Quartile: 2 | Citations: 19 DOI: 10.1016/j.geomphys.2010.11.015 New Conserved quantities for the Spaces of Different Curvatures 2010 TOOBA SIDDIQUI Modern Physics Letters A, Volume: 25 Issue: 13 Pages: 1107-1114 Impact Factor: 0.99 | Quartile: 3 | Citations: 11 DOI: 10.1142/S021773231003241X Another Representation for the Maximal Lie Algebra of sl(n +2,R) in Terms of Operators 2009 Asghar Qadir TOOBA SIDDIQUI Differential Equations and Nonlinear Mechanics, Article ID 152698, 3 pages Impact Factor: N/A | Citations: 2 DOI: 10.1155/2009/152698 UNIQUENESS OF THE McVITTIE SOLUTION AS PLANE SYMMETRIC SOURCELESS 2008 **ELECTROMAGNETIC FIELD SPACETIMES** TOOBA FEROZE Asghar Qadir M. ZIAD Modern Physics Letters A, Modern Physics Letters A Vol. 23, No. 11, Pages 825-828, 2008 Impact Factor: 1.334 | Quartile: 2 | Citations: 1 DOI: doi.org/10.1142/S0217732308025437 The connection between isometries and symmetries of geodesic equations of the underlying spaces 2006 F. M. Mahomed Asghar Qadir Tooba Feroze Nonlinear Dynamics, Volume: 45 Issue: 1-2 Pages: 65-74 Impact Factor: 0.902 | Quartile: 2 | Citations: 79 DOI: 10.1007/s11071-006-0729-y Group theoretic methods for approximate invariants and Lagrangians for some classes of 2002 y_x0001_#_x0002_F(t)y_x0003_#y"f (y, y_x0003_) A. H. Kara TOOBA SIDDIQUI International Journal of Non-Linear Mechanics, International Journal of Non-Linear Mechanics, Volume: 37 Issue: 2 Pages: 275-280 Impact Factor: 0.603 | Quartile: 3 | Citations: 35

2001

Impact Factor: 1.151 | Quartile: 2 | Citations: 67 DOI: 10.1063/1.1385175

The Classification of Plane Symmetric Spacetimes by Isometries

JOURNAL OF MATHEMATICAL PHYSICS, Volume: 42 Issue: 10 Pages: 4947-4955

DOI: 10.1016/S0020-7462(00)00111-6

Asghar Qadir M. Ziad TOOBA SIDDIQUI

Conference Proceedings

Classification of a Class of Plane Symmetric Static Spacetimes According to the Noether Symmetries TOOBA FEROZE BISMAH JAMIL	2012
The Thirteenth Marcel Grossmann Meeting, res.country(196,)	
Citations: N/A	
DOI: 10.1142/9789814623995_0294	
On the existence of new conserved quantities for the spaces of different curvatures TOOBA SIDDIQUI	2009
The Twelfth Marcel Grossmann Meeting , res.country(75,)	
Citations: N/A	
DOI: 10.1142/9789814374552_0353	
Editorial Activities	
Arabian Journal of Mathematics	2025
Reviewed Papers for Journals	
Impact Factor: 0.9	
International Journal of Modern Physics A	2024
Reviewed Papers for Journals	
Impact Factor: 1.4	
Symmetry	2024
Reviewed Papers for Journals	
Impact Factor: 2.7	
Discrete and Continuous Dynamical Systems - Series S	2024
Reviewed Papers for Journals	
Impact Factor: 1.86	
Discrete and Continuous Dynamical Systems - Series S	2024
Reviewed Papers for Journals	
Impact Factor: 1.86	
Indian Journal of Physics	2024
Reviewed Papers for Journals	
Impact Factor: 1.7	
Arabian Journal of Mathematics	2023
Reviewed Papers for Journals	
Impact Factor: 1.2	
Arabian Journal of Mathematics	2023
Reviewed Papers for Journals	
Impact Factor: 1.2	
Symmetry	2023
Reviewed Papers for Journals	
Impact Factor: 2.94	
Symmetry-Basel	2023
Reviewed Papers for Journals	
Impact Factor: 2.940	
The European Physical Journal Plus	2023
Reviewed Papers for Journals	
Impact Factor: 3.758	
Arabian Journal of Mathematics	2023
Reviewed Papers for Journals	
Impact Factor: N/A	
Symmetry-Basel	2023
Reviewed Papers for Journals	
Impact Factor: 2.940	
The European Physical Journal Plus	2023

Reviewed Papers for Journals Impact Factor: N/A	
Arabian Journal of Mathematics	2023
Reviewed Papers for Journals	2020
Impact Factor: N/A	
Symmetry-Basel	2022
Reviewed Papers for Journals	
Impact Factor: 2.940	
Arabian Journal of Mathematics	2022
Reviewed Papers for Journals	
Impact Factor: N/A	
Symmetry-Basel	2022
Reviewed Papers for Journals	
Impact Factor: 2.940	
Arabian Journal of Mathematics	2022
Reviewed Papers for Journals	
Impact Factor: NA	
Symmetry-Basel	2022
Reviewed Papers for Journals	
Impact Factor: 2.940	
Symmetry-Basel	2022
Reviewed Papers for Journals	
Impact Factor: 2.940	
	2022
Reviewed Papers for Journals	
Impact Factor: 2.713	
	2022
Reviewed Papers for Journals	
Impact Factor: 2.713	
	2022
Reviewed Papers for Journals	
Impact Factor: 0	
	2022
Reviewed Papers for Journals	
Impact Factor: 4.13	
	2021
Reviewed Papers for Journals	
	2021
Reviewed Papers for Journals	
Impact Factor: 1.07	
	2021
Reviewed Papers for Journals	2021
Impact Factor: 4.379	
	0004
Reviewed Papers for Journals	2021
Impact Factor: 1.407	
F	
Designated Designation for Journals	2021
Reviewed Papers for Journals	
	2020

Reviewed Papers for Journals