Personal Information



Name: ZAHID AHMAD

CNIC No: 37402-0980064-3

Marital status: Married

Date of Birth: December 06, 1976

Nationality: Pakistani

Permanent Address: Village and Post Office Bhalakhar Tehsil Kallar

Saydan District Rawalpindi

Present Address: Department of Mathematics COMSATS University, Islamabad, Pakistan.

Email: zahidpum@gmail.com

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Career Objectives

To pursue a career oriented job in the field of Mathematics, where my research and teaching skills can be utilized and developed in an organized and competitive way.

Strengths

- Friendly, enthusiastic and credible in challenging positions.
- Experience and decision making under pressures.
- Mathematics professional with the experience of teaching and having sound research skills. Have good working experience with scientific tools like Mathematica, Maple, WinEdt, Latex.

Qualifications

2004-2009 University of the Punjab, Lahore

PhD.

Field: General Relativity

Research Topic: Gravitational Collapse: A Key Issue in

General Relativity

Supervisor: Prof. Dr. Muhammad Sharif

1998 - 2000 Quaid-i-Azam University, Islamabad

M.Sc. (Mathematics) 2327/3000 1st Div.

1995 - 1997 University of the Punjab, Lahore

	B.Sc. (Mathematics A & B, P	hysics) 565/800	1 st	Div.
1993 – 1995	Govt. Gordon College, Rawalpindi			
	F.Sc. (Pre- Engineering)	721/1100	1st	Div.
1993	Govt. High School KallarSydan, Rawalpindi			
	Matriculation (Science)	668/850	1 st	Div.

March 22 to date, **Tenured Professor, Mathematics COMSATS** University, Islamabad, Pakistan Nov 2016 to March 21, **Associate professor in Mathematics COMSATS** 2021 University, Islamabad, Abbottabad Campus, Pakistan **July 2009 to Nov 2016 Assistant professor in Mathematics COMSATS** University, Islamabad, Abbottabad Campus, Pakistan Feb 2009-Jun 2009 **Lecturer in Mathematics COMSATS Institute of** University, Islamabad, Abbottabad Campus, Pakistan Sep2002-April2004 Worked as Lecturer in Mathematics at Govt. Degree College Murree and taught mathematics up to intermediate level. Pakistan

Rawalpindi. Pakistan

Administrative Experience

May1997 - Jan1998

ACADEMIC EXPERIENCE

1. Head, department of Mathematics, COMSATS *University*, *Islamabad*, *Abbottabad Campus*, from July 14, 2022 to July 31, 2023..

National Model High School KallarSaydan

2. Head, department of Mathematics, COMSATS *University*, *Islamabad*, *Abbottabad Campus*, from October 2015 to December 2015.

- 3. Graduate Program Coordinator, department of Mathematics, COMSATS *University*, *Islamabad*, *Abbottabad Campus*, from February 2014 to February 2016.
- 4. Member of Departmental Selection Committee COMSATS *University*, *Islamabad*, *Abbottabad Campus*.
- 5. Member of Departmental Advisory Committee, COMSATS *University*, *Islamabad*, *Abbottabad Campus*.,
- 6. Member of Depatmental Academic Regularity Committee, COMSATS *University*, *Islamabad, Abbottabad Campus*.
- 7. Convener of Departmental Question Paper Review Committee, COMSATS *University*, *Islamabad, Abbottabad Campus*.
- 8. Group Incharge of Calculus II for three semesters at COMSATS *University*, *Islamabad*, *Abbottabad Campus*.
- 9. Group Incharge of Calculus III for two semesters at COMSATS *University*, *Islamabad*, *Abbottabad Campus*.
- 10. Group Incharge of Calculus I for one semester at COMSATS *University*, *Islamabad*, *Abbottabad Campus*.
- 11. Group Incharge of Differential Equations for three semesters at COMSATS *University*, *Islamabad*, *Abbottabad* Campus.
- 12. Group Incharge of Linear Algebra for two semesters at COMSATS *University*, *Islamabad*, *Abbottabad Campus*.
- 13. Convener of Facilitation Committee Symposia 2009 to date, COMSATS *University*, *Islamabad*, *Abbottabad Campus*.

Computer Skills

Tools: MS Word, MS Power Point.

Scientific Tools: Mathematica, Latex., Win Edit, Maple.

Research Skills

Worked as research scholar for more than three years as Ph.D scholar at Department of Mathematics, University of the Punjab, Lahore, Pakistan.

Publications

2023

1. Hassan Shah, Hasrat Hussain Shah, Zahid Ahmad, Sardar Muhammad Hussain, Amna Ali and Farook Rehman, Study of gravastars in Einstein-Gauss-Bonnet Gravity, Physica Scripta, 98(2023)085246. (IF=3.081)

2. Hassan Shah, Hasrat Hussain Shah, Zahid Ahmad, Sardar Muhammad Hussain and Abdul Quayam Khan, Thermodynamical study of Black Hole with Cloud of Strings and Quintessence in the 4D Einstein-Gauss-Bonnet Context:International Journal of Modern Physics A, 38(2023)2350057. (IF=1.475)

2022

- 3. Hassan Shah, Suhail Khan, DianchenLu, Zahid Ahmad, S. M. Hussain and Hasrat Hussain Shah, Gravitational collapse of dissipative fluid in f (R, G) gravity: International Journal of Modern Physics A, 23(2022)2250143 (IF=1.381)
- 4. Hina Azmat, M. Zubair, Zahid Ahmad, Study of anisotropic and non-uniform Gravastars by gravitational decoupling in f (R, T) gravity: Annals of Physics, 439(2022)168769 (IF=2.73)

2021

- 5. Zahid Ahmad, M. Zubair, M. Ali Raza ,Homogeneous Perfect Fluid Collapse in Five Dimensional Spherically Symmetric Spacetime: Modern Physics Letters A, 36(2021) 2150173 (IF=2.066)
- 6. Hassan Shah, Zahid Ahmad, Hasrat Hussain Shah, Quintessence background for 4D Einstein-Gauss-Bonnet black holes: Physics Letters B, 818 (2021) 136383 (IF=4.77)

2020

7. S. Khan, Hassan Shah, Zahid Ahmad Collapsing of Charged Cylindrical Symmetric Source in f(R,G) Gravity with Heat Flux: International Journal of Geometric Methods in Modern Physics 17 (2020) 2050026(IF=1.022)

2019

8. <u>Hassan Shah, Zahid Ahmad, S. Khan</u>Collapsing Solutions in Higher Dimensional Spacetime: Int. J. Mod. Phys. D 28(2019)1950117(IF=1.9)

2018

- 9. Zahid Ahmad, Hassan Shah, S. Khan Spherical Gravitational Collapse in f(R) gravity with linear equation of state: Commun. Theor. Phys. 70 (2018) 185–189 (IF=1.066)
- 10. Q. Iqbal, H. Hussain Shag, Zahid Ahmad, High Speed Cylindrical Gravitational Collapse with Anisotropic Pressure: Universe 4(2018)70 (ISI)

11. <u>Hassan Shah, Zahid Ahmad ,S. Khan</u>Higher Dimensional Shear-free Radiating Collapse: Canadian. J. Physics 96(2018)1201-1204(IF=1.016)

2017

- 12. S. Khan, Hassan Shah, Zahid Ahmad, M. Ramzan Final fate of charged anisotropic fluid collapse: Mod. Phys. Lett. A32(2017)1750192 (IF=1.308)
- 13. <u>G. Abbas, M.S. Khan, Zahid Ahmad, M. Zubair</u> Higher-dimensional inhomogeneous perfect fluid collapse in f(R) gravity: Eur. Phys. J. C77(2017)443 (IF=5.172)
- 14. Zahid Ahmad, Muhammad Shoaib Khan Higher dimensional dust collapse in f(R) gravity: Turkish. J. Physics 41(2017)104-112 (ISI)
- 15. <u>G. Abbas</u>, <u>Hassan Shah</u>, <u>Zahid Ahmad</u>, <u>Some Analytic Models of Plane Symmetric Radiating Collapse: Canadian. J. Physics 95(2017)65 (IF=0.983)</u>

2016

16. Zahid Ahmad, Sania Abdul Malik Gravitational Collapse With Cosmological Constant and Anisotropic Pressure: Int. J. The. Physics 55(2016)600 (IF=0.964)

2015

- 17. <u>G. Abbas</u>, <u>Zahid Ahmad</u>, <u>Hassan Shah</u> Collapsing Plane Symmetric Source with Heat Flux and Conformal Flatness: Astrophys. Space Sci. science 357(2015)138. (IF=1.678)
- 18. M. Farasat Shamir, Zahid Ahmad, Zahid Raza Gravitational Dust Collapse in f(R) Gravity: Int. J. The. Physics 54(2015)1450--1460) (IF=1.041)
 2014

19. Zahid Ahmad, Abdul Haseeb Higher Dimensional Spherically Symmetric Gravitational Collapse: Int. J. The. Physics 53(2014)1201-1207). (IF=1.184) 2013

- 20. Zahid Ahmad, Batool Imtiaz, High-Speed Cylindrical Collapse of Type I Matter Braz. J. Physics.43(2013)57. (IF=0.683)
- 21. Zahid Ahmad, Hasrat Hussain Shah Gravitational Collapse of Dust Cloud with Dark Energy: Int. J. The. Physics 52(2013)1490-1503. (IF=1.188)
- 22. <u>Zahid Ahmad</u>, <u>Qazi Zahoor Ahmed</u>, <u>Abdul Sami Awan</u> Gravitational Collapse with Heat Flux and Gravitational Waves: Int. J. The. Physics 52(2013)3598-3603. (IF=1.188)

- 23. M. Sharif, Zahid Ahmad, Gravitational Dust Collapse with Cosmological Constant: World Applied Sciences Journal 16(2012) 1516. (ISI)
- 24. Zahid Ahmad, Naked Singularity in Higher Dimensional Charged-Vaidya Spacetime: Mod. Phys. Lett. A 27(2012)1250148 (IF=1.11)

2009

- 25. Zahid Ahmad, Tomohiro Harada, Ken-ichi Nakao, M. Sharif, High-Speed Collapse of a Hollow Sphere of Type I Matter.Class. Quant. Grav. 26(2009)035007. (IF=3.029) 2008
 - 26. M. Sharif, Zahid Ahmad, Plane Symmetric Gravitational collapse: Int.J.Mod.Phys. A23 (2008)181. (IF=0.982)
 - 27. M. Sharif, Zahid Ahmad, Five Dimensional Perfect Fluid Collapse with Cosmological Constant: J. Korean Physical Society 52(2008)980.

(IF=0.445)

28. M. Sharif, Zahid Ahmad, Higher Dimensional Perfect Fluid Collapse with Cosmological Constant: Acta Physica Polonica B 39(2008)1337.

(IF=0.767)

2007

29. M. Sharif, Zahid Ahmad,: Gravitational Perfect Fluid collapse With Cosmological Constant: Mod. Phys. Lett.

A 22 (2007)1493. (IF=1.46)

30. M. Sharif, Zahid Ahmad, Addendum: Gravitational Perfect Fluid collapse With Cosmological Constant: Mod. Phys. Lett.

A 22 (2007) 2947. (IF=1.46)

31. M. Sharif, Zahid Ahmad, High-Speed Cylindrical Collapse of Two Perfect Fluids: Gen. Relativ. Grav. 39 (2007)1331. (IF=1.59)

PROCEEDING PUBLICATIONS:

1. High Speed Cylindrical Collapse of Two Dust Fluids: M. Sharif and Zahid Ahmad, Proceedings of the 11th Marcel Grossmann Meeting

On General Relativity, Freie University Berlin-Germany, July, 23-29,

2006 eds. H. Kleinert, R.T. Jantzen and R. Ruffini (World

Scientific, 2008)2291-2293.

Conferences Attended

As Speaker

- 1. January 27-31, 2019. Ist PUICGC Conference, University of the Punjab, Lahore. (Pakistan)
- 2. Feb 10-14, 2015. International Conference on Relativistic Astrophysics, University of the Punjab, Lahore.(Pakistan)
- 3. January 27, 2014 International Symposia On Pure and Applied Mathematics" University of Sargodha, Sargodha
- 4. May 7-8, 2012. 7th Symposium on Computational Complexities, Innovations Solutions (CCIS-2012), COMSATS Institute of Information Technology, Abbottabad.(Pakistan).
- 5. Feb 11-13, 2010. Conference on General Relativity and Gravitation 2010, University of the Punjab, Lahore.(Pakistan)
- 6. March4-7, 2007.3rd International Conference on 21st Century Mathematics 2007, School of Mathematical Sciences GC University, Lahore. (Pakistan)
- 7. March 9-12, 2008. LUMS 2nd International Conference on Mathematics and its applications in Information Technology 2008, Lahore University of Management Sciences, Lahore. (Pakistan)

As Participant

- 1. November22-25, 2021. 4th PUICGC Conference, University of the Punjab, Lahore.(Pakistan).
- 2. March 4-6, 2005. 2nd world conference on 21st century mathematics 2005, School of Mathematical Sciences, GC University, Lahore.
- 3. March 27th -April 1st 2006. 12th Regional Conference on Mathematical Physics, National Centre For Physics, Quaid-e-Azam University, Islamabad.
- 4. April 6, 2006. International Symposium on Relativity, Department of Mathematics, University of the Punjab, Lahore
- 5. June 7-9, 2007. All Pakistan Mathematical Conference, held in Pakistan Academy of Sciences, Constitution Avenue, Islamabad.

Honors

- 1. Awarded Scholarship for PhD by Higher Education Commission Islamabad, Pakistan through the Indigenous PhD 5000 Fellowship Program Batch-I.
- 2. Research Productivity Award, COMSATS University, 2012
- 3. Research Productivity Award, COMSATS University, 2013
- 4. Research Productivity Award, COMSATS University, 2014
- 5. Research Productivity Award, COMSATS University, 2015
- 6. Research Productivity Award, COMSATS University, 2016
- 7. Research Productivity Award, COMSATS University, 2017

MS Dissertations Supervised

- 1. <u>Nasir Khan</u>, Study of Radiating Gravitational Collapse in Vaidya, COMSATS University Islamabad, Abbottabad Campus, Pakistan, 2022(MS).
- 2. <u>Ateeba Javed</u>, Investigation of Gravitational Collapse with Spin Fluid, COMSATS University Islamabad, Abbottabad Campus, Pakistan, 2022(MS).
- 3. <u>Waqas Shafi</u>, Gravitational Collapse in the Presence of Cosmological Constant, COMSATS University Islamabad, Abbottabad Campus, Pakistan, 2022(MS).
- 4. <u>Tayyaba Bibi</u>, Effects of Higher Dimensions on Gravitational Collapse in Vaidya space-time, COMSATS University Islamabad, Abbottabad Campus, Pakistan, 2021(MS).
- 5. <u>Muhammad Ali Raza</u>, Effects of Pressure and Higher Dimensions on Gravitational Collapse, COMSATS University Islamabad, Abbottabad Campus, Pakistan, **2020(MS)**.
- 6. Syed Muhammad Baqir Ali, Investigation of Gravitational Collapse with Vaidya Spacetime, COMSATS University Islamabad, Abbottabad Campus, Pakistan, 2019(MS).
- 7. <u>Mahboob ul Haq</u>, Spherical Collapse in f(R) Theory of Gravity, COMSATS University Islamabad, Abbottabad Campus, Pakistan, **2018(MS)**.
- 8. <u>Said Mobin</u>, Study of Non-spherical Collapse in f(R) Theory, COMSATS University Islamabad, Abbottabad Campus, Pakistan, **2018(MS)**.
- 9. <u>Beenish</u>, Gravitational Collapseof Anisotropic Fluid, COMSATS Institute of Information Technology Abbottabad, Pakistan, **2017(MS)**.
- 10. <u>Aroosa Imtiaz</u>, Dissipative Gravitational Collapse, COMSATS Institute of Information Technology Abbottabad, Pakistan, **2017 (MS)**.

- 11. <u>Muhammad Shoaib Khan</u>, Gravitational Collapse in f(R) Gravity, COMSATS Institute of Information Technology Abbottabad, Pakistan, **2016 (MS)**.
- 12. <u>Muhammad Mazhar</u>, Nature of the Singularities in Higher Dimensional Spacetime, COMSATS Institute of Information Technology Abbottabad, Pakistan, **2016** (MS).
- 13. Majid Khan, Quasi-Spherical Gravitational Collapse, COMSATS Institute of Information Technology Abbottabad, Pakistan, 2016 (MS).
- 14. (MS)MunazaWaheed, Study of Collapse in Cylindrical Spacetime COMSATS Institute of Information Technology Abbottabad, Pakistan, 2015. (MS)
- 15. Hassan Shah, Non-Spherical Gravitational Collapse, COMSATS Institute of Information Technology Abbottabad, Pakistan, **2014**. (MS)
- 16. Sania Abdul Malik, Gravitational Collapse Using Junction Conditions, COMSATS Institute of Information Technology Abbottabad, Pakistan, 2013. (MS)
- 17. Quaid Iqbal, Gravitational Collapse of Type I Matter Field, COMSATS Institute of Information Technology Abbottabad, Pakistan, 2013. (MS)
- 18. <u>Hasrat Hussain Shah</u>, Gravitational Collapse in the Presence of Dark Energy, COMSATS Institute of Information Technology, Abbottabad, Pakistan, **2012**. (MS)
- 19. <u>Qazi Zahoor Ahmad</u>, Cylindrical Gravitational Collapse, COMSATS Institute of Information Technology, Abbottabad, Pakistan, **2012**.(MS)
- 20. <u>Abdul Haseeb</u>, Higher Dimensional Gravitational Collapse of Type-I Matter, COMSATS Institute of Information Technology, Abbottabad, Pakistan, **2011**. (MS)
- 21. <u>Batool Imtiaz</u>, Gravitational Collapse: An Outstanding Issue in General Relativity, COMSATS Institute of Information Technology Abbottabad, Pakistan, **2010**. (MS)

Dissertations Evaluated as External Examiner

Graduate Level: MS:22Ph.D: 11

Under Graduate Level: 06

Courses Taught

Graduate Level:

- 1. Advanced Partial Differential Equations
- 2. General Relativity

Under Graduate Level:

3. Special Relativity

- 4. Vectors and Tensors
- 5. Ordinary Differential Equations
- 6. Linear Algebra
- 7. Calculus-I
- 8. Calculus-II
- 9. Calculus-III

References

1. **Prof. Dr. M. Sharif** (Ph. D Supervisor) **Professor**

Department of Mathematics,

University of the Punjab, Lahore.

msharif@math.pu.edu.pk

2. Prof. Dr. Mir Asadullah Advisor

CIIT, Abbottabad

3. Prof. Dr. Naresh Dadhich Professor

IUCAA, India.

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