

Name : Dr. Tuhina Manna

I aim to introduce the wonderful world of mathematics to my students and help them develop an understanding and appreciation for the subject. I have been teaching mathematics in St. Xavier's College(Autonomous), Kolkata since 5th January 2015. I am a dedicated researcher working in the field of **General Theory of Relativity**, and have published 9 articles in prestigious SCOPUS indexed journals, all of which are hence included in UGC CARE list Group-A.



1) **Personal Details:** Date of Birth: 03.11.1988
Nationality : Indian
Category: General

1) **Contact Details:** Email address : tuhina.manna@sxccal.edu

2) **ACADEMICS:**

Name of exam.	Year	Board / University
10th standard	2005	ICSE
12th standard (Science)	2007	ISC
B.SC (Mathematics Hon.)	2010	Scottish Church College (University of Calcutta)
M.SC (Mathematics)	2012	Lady Brabourne College (University of Calcutta)
NET Qualified (Mathematical Sciences)	June 2014	CSIR (AIR: 35)
PHD (Mathematics)	11.06.2019	Jadavpur University

3) **Previous Experience :**

1. Worked at Lady Brabourne College as a Guest Lecturer in the Department of Mathematics from July 2014 to December 2014.
2. Worked at Sri Shikshayatan College, simultaneously as a Part-time Lecturer in the Department of Mathematics, and as a Guest Lecturer in the BBA Department (Business Mathematics and Statistics) from 19th August 2013 to 2nd January 2015.

4) **Research Papers :**

A. Published In Peer Reviewed Journals:

1. Title: "Solar system tests in Rastall gravity"
Journal : Modern Physics Letters A (Impact Factor: 1.367 (2018)).
Publisher: World Scientific Publishing Company
Mod.Phys.Lett. A 33, No. 1 (2020) 2050034 (DOI: 10.1142/S0217732320500340)
2. Title: "Charged Perfect Fluid Sphere in Higher Dimensional Spacetime"
Journal: Indian Journal of Physics (Impact Factor: 1.242)
Publisher: Springer India
DOI: 10.1007/s12648-019-01600-w

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3. Title of the paper: “Gravitational lensing, precession of periapsis and time delay due to wormhole in quintessence polytropic spacetime”.

Journal Name: Modern Physics Letters A (Impact Factor: 1.367 (2018)).

Publisher: World Scientific Publishing Company

Mod.Phys.Lett. A34 (2019) no.32, 1950264 (DOI: 10.1142/S021773231950264X)

4. Title of paper: “Strong lensing of a regular black hole with an electrodynamic source”.

(This paper is not included in PhD thesis)

Journal Name: General Relativity and Gravitation ;

Publisher: Springer US (Impact Factor: 1.721)

Gen Relativ Gravit (2018) 50: 54.

DOI: 10.1007/s10714-018-2375-3

5. Title: “Wormhole supported by dark energy admitting conformal motion”.

Name of Journal: European Physical Journal C ; (Impact Factor: 5.331 (2016))

Publisher: Springer Berlin Heidelberg

Eur. Phys. J. C (2016) 76:708

DOI 10.1140/epjc/s10052-016-4547-1

6. Title: “Modelling of anisotropic compact stars of embedding class one”

Name of Journal: European Physical Journal A (Impact Factor: 2.833 (2016));

Publisher: Springer Berlin Heidelberg

Eur. Phys. J. A (2016) 52: 312.

DOI 10.1140/epja/i2016-16312-x.

7. Title: “Anisotropic compact star with Tolman IV gravitational potential”

Name of Journal: Astrophysics and Space Science ; Impact Factor: 1.622 (2016)

Publisher: Springer Netherlands

Astrophys Space Sci (2016) 361:284.

DOI 10.1007/s10509-016-2876-z.

8. Title: “A new class of relativistic model of compact stars of embedding class I”

Name of Journal: International Journal of Modern Physics D ;

Publisher: World Scientific

International Journal of Modern Physics D (2017) 26 :1750090

DOI 10.1142/S0218271817500900.

Impact Factor: 2.476 (2017)

9. Title of paper: “Dark energy stars: Stable configurations”

Journal: Canadian Journal of Physics

Publisher: NRC Research Press

Can.J.Phys. 96 (2018) no.6, 594-602

(DOI : 10.1139/cjp-2017-0526)

Impact Factor: 0.964 (2014)

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5) Paper Presentation:

1. International Level:

Paper titled : “ Wormhole supported by dark energy admitting conformal motion”

At: The *International Conference on Mathematical Analysis and Application in Modeling*

Organized by: Department of Mathematics, Jadavpur University in association with Indian Statistical Institute (Kolkata) and Biomathematical Society of India on January 9-12, 2018.

2. Indian / State Level:

Paper titled: “Charged Perfect Fluid Sphere in Higher Dimensional Spacetime”

At: *108th Foundation Day Celebration, 2015.*

Organized by : Calcutta Mathematical Society on September 6-7, 2015.

6) Seminars/Workshops:

1. Actively organized and participated in the skill development programme on “ADVANCED EXCEL- A PROFESSIONAL APPROACH” held on 14th December, 2018 at St. Xavier’s College (Autonomous), Kolkata.

1. Actively participated in the two day Faculty Development Program on “Data Analytics using SPSS” , held on 2-3 July, 2018 at St. Xavier’s College (Autonomous), Kolkata.

2. Actively participated in National Level Teacher’s Enrichment Workshop 2018 in Mathematical Sciences from 23rd May to 6th June 2018 , organized by the Calcutta Mathematical Society in joint collaboration with the (Indian) Mathematics Consortium Pune.

3. Actively participated in the Introductory Workshop on Astrophysics and Cosmology held at Aliah University, Kolkata during September 27-28, 2016.

4. Actively participated in and successfully completed the seven day UGC sponsored National level Faculty Development Programme , workshop on Research Methodology using SPSS organized by St. Xavier’s College(Autonomous), Kolkata, Departments of Commerce and Business Administration in collaboration with Institute of Development Studies Kolkata held from 1st October to 8th October , 2015.

5. Participated in the Human Values Development Program (HVDP) , Workshop for Faculty of Colleges in India organized by All India Association for Christian Higher Education held at St. Xavier’s College (Autonomous) , Kolkata on 18th November 2015.

6. Participated in UGC Sponsored One Day National Symposium 2015 on “Overcoming Challenges for Sustainable Corporate Development” held on 21st March 2015, organized by Department of commerce [PG & UG] and Business Administration, St. Xavier’s College(Autonomous), Kolkata in collaboration with Indian Council of Social Science Research.

7. Participated in a 5 – day workshop on “Soft computing” held on 28th to 29th October, 1st to 3rd November, 2010 organized by Department of Mathematics of Lady Brabourne College, Kolkata.

8. Participated in one day UGC-CPE sponsored seminar on “Some Topics of Algebra and Analysis” held by the Department of Mathematics, Lady Brabourne College, Kolkata, in collaboration with Indian Society of Non-Linear Analysis (ISNA) on 30th May 2012.

9. Participated in a 2-day seminar on “Mathematics and its Application” held on 22nd November 2013 in celebration of National Mathematics Day organized by the Department of Mathematics, Lady Brabourne College, Kolkata, sponsored by West Bengal State Council of Science and Technology.

7) Languages Known : English, Bengali, Hindi.

8) Computer Skills:

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- Good knowledge of programming languages like C and C++ .
- Statistical tools like **SPSS**
- Softwares like Maple & Mathematica.
- And writing tool like LaTeX.