

# CURRICULUM VITAE

**NAME: DR. TUHINA MANNA**

1) **Personal Details:** Date of Birth: 03.11.1988  
Father's Name: Tushar Kanti Manna  
Nationality: Indian  
Category: General

2) **Contact Details:** Address: 15/3 Chowdhury Para  
2<sup>nd</sup> Bye Lane, Howrah – 711104.  
Phone no. : 9830252849  
Email address : [tuhina.manna@sxccal.edu](mailto:tuhina.manna@sxccal.edu)



## 3) ACADEMIC QUALIFICATIONS:

Name of exam.	Year	Board / University	Topics/Subjects
10 <sup>th</sup> standard	2005	ICSE	Eng, Beng, Math, Science, Geo,Hist.& Civics, Com
12 <sup>th</sup> standard	2007	ISC	Eng, Beng, Mathematics, Physics, Chemistry
B.SC	2010	University of Calcutta	Mathematics(Hon.) Phys + Chem.(Gen.)
M.SC	2012	Lady Brabourne College (University of Calcutta)	Mathematics
NET	June 2014	CSIR	Mathematical sciences (All India Rank: 35)
PHD	11.06.2019	Jadavpur University	Relativistic Models of Compact Stars and Gravitational Lensing of Wormholes

## 4) Experience :

1. Working at St. Xavier's College as an Assistant Professor in the Department of Mathematics since 6<sup>th</sup> January, 2020.

2. Worked at St. Xavier's College as an Assistant Professor in the Department of Commerce Evening from 5<sup>th</sup> January, 2015 to 5<sup>th</sup> January 2020.

3. Simultaneously worked, as a Part-time Lecturer in the Department of Mathematics, and as a Guest Lecturer in the BBA Department (Business Mathematics and Statistics) from 19<sup>th</sup> August 2013 to 2<sup>nd</sup> January 2015, at Sri Shikshayatan College.

## 5) Research Articles Published In *Scopus Indexed Journals*:

1. Title of paper: "Solar System Tests in Einstein-{\AE}ther gravity"

**Authors:** Tuhina Manna, Farook Rahaman, Amna Ali, Bidisha Samanta.

**Journal Name:** Canadian Journal of Physics (UGC CARE LIST II)

**DOI:** <https://doi.org/10.1139/cjp-2021-0020> ; Publisher: NRC Research Press

ISSN (print): 1208-6045 ; ISSN (online):0008-4204 ; Impact Factor: 0.964 (2014)

2. Title: "Charged Perfect Fluid Sphere in Higher Dimensional Spacetime"

Authors: Dr.Farook Rahaman, Dr.Piyali Bhar, Dr.S. Ray, G.S. Khadekar

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Journal Name: Indian Journal of Physics

**Citation:** *Indian J Phys* 94, 1679–1690 (2020) (UGC CARE LIST II)

(DOI: 10.1007/s12648-019-01600-w)

3. Title of paper: “Solar system tests in Rastall gravity”  
Co-Authors: Farook Rahaman, Monimala Mondal  
Journal : Journal Name: Modern Physics Letters A (UGC CARE LIST II)  
**Citation: Mod.Phys.Lett.A 35 (2019) 07, 2050034**  
(Impact Factor: 1.367 (2018). Publisher: World Scientific
4. 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 (UGC CARE LIST II)  
(Impact Factor: 1.367 (2018). Publisher: World Scientific  
**Citation: Mod.Phys.Lett.A34(2019)no.32,1950264** (DOI: 10.1142/S021773231950264X)
5. Title of paper: “Strong lensing of a regular black hole with an electrodynamics source”.  
Co-authors: Farook Rahaman, Sabiruddin Molla, Jhumpa Bhadra, Hasrat Hussain Shah.  
Journal Name: General Relativity and Gravitation (UGC CARE LIST II)  
**Citation: Gen Relativ Gravit (2018) 50: 54.**  
Print ISSN :0001-7701 ; Online ISSN :1572-9532 ; Impact Factor: 1.721; Publisher: Springer US
6. Title of paper: “Dark energy stars: Stable configurations”  
Journal: Canadian Journal of Physics (UGC CARE LIST II)  
Co-Authors: Piyali Bhar, Farook Rahaman, Ayan Banerjee.  
**Citation: Can.J.Phys. 96 (2018) no.6, 594-602** (DOI : 10.1139/cjp-2017-0526)  
ISSN (print): 1208-6045 ; ISSN (online):0008-4204 ; Impact Factor: 0.964 (2014)
7. Title: “A new class of relativistic model of compact stars of embedding class I”  
Co-authors: Piyali Bhar, Ksh. Newton Singh.  
Name of Journal: International Journal of Modern Physics D (UGC CARE LIST II)  
**Citation: International Journal of Modern Physics D (2017) 26 :1750090**  
(DOI: 10.1142/S0218271817500900) Publisher: World Scientific  
ISSN (print): 0218-2718 ; ISSN (online): 1793-6594 ; Impact Factor: 2.476 (2017)
8. Title: “Wormhole supported by dark energy admitting conformal motion”.  
Co-authors: Farook Rahaman, Piyali Bhar, Ayan Banerjee.  
Name of Journal: European Physical Journal C (UGC CARE LIST II)  
**Citation: Eur. Phys. J. C (2016) 76:708** (DOI 10.1140/epjc/s10052-016-4547-1)  
Print ISSN :1434-6044 ; Online ISSN :1434-6052 ; Impact Factor: 5.331 (2016)  
Publisher: Springer Berlin Heidelberg

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

Co-authors: Piyali Bhar, S.K. Maurya, Y.K. Gupta.

Name of Journal: European Physical Journal A ; (UGC CARE LIST II)

Publisher: Springer Berlin Heidelberg

**Citation:** *Eur. Phys. J. A (2016) 52: 312.* (DOI 10.1140/epja/i2016-16312-x.)

Print ISSN 1434-6001; Online ISSN 1434-601X ; Impact Factor: 2.833 (2016)

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

Co-authors: Piyali Bhar, Ksh. Newton Singh.

Name of Journal: Astrophysics and Space Science ; (UGC CARE LIST II)

Publisher: Springer Netherlands

**Citation:** *Astrophys Space Sci (2016) 361:284.* (DOI 10.1007/s10509-016-2876-z.)

Print ISSN 0004-640X ; Online ISSN 1572-946X ; Impact Factor: 1.622 (2016)

## 6.) Paper Presentation:

### 1. International Level:

**a) Paper titled :** “Strong Lensing of a Regular Black Hole with an Electrodynamics Source” on 7<sup>th</sup> September 2020.

**At:** *IWARA 2020 Video-Conference - 9th International Workshop on Astronomy and Relativistic Astrophysics* held at Mexico City, from 6<sup>th</sup> to 12<sup>th</sup> September, 2020.

**b) 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:** *108<sup>th</sup> Foundation Day Celebration, 2015*, organized by Calcutta Mathematical Society on September 6-7, 2015.

## 7) Seminars/Workshops:

1. Actively participated in the online seminar on “**Bouncing cosmology in a curved braneworld**” on 22 July 2021, organised by NIT Rourkela.

2. Actively participated in the online National Conclave on “**Recent Trends in Theory and Applications of Statistics**” organised by Department of Statistics, K. C. College, (DBT- Star Status College Scheme), from 29<sup>th</sup> June to 2<sup>nd</sup> July 2021.

3. Actively participated in the **Faculty Development Program** organized by the Department of Commerce, St. Xavier’s College (Autonomous), Kolkata, November 21, 2020.

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4. Attended in Two-Day Webinar on "**NAAC ASSESSMENT AND ACCREDITATION PROCESS**" under UGC PARAMARSH Scheme, St. Xavier's College (Autonomous), Kolkata, July 30 and 31, 2020
5. Actively participated in the online International Symposium on "**Covid 19 & Beyond: The New normal in HEIs**" on 10<sup>th</sup> June, 2020 organised by the J.C. Bose University of Science and Technology, YMCA, Faridabad.
6. Actively participated in the One day National e-Workshop on "**Application of Mathematics and its contemporary scientific and technical terminology in Hindi**", from 14 to 16<sup>th</sup> June, 2020 organised by the Commission for Scientific and Technical Terminology, Jawaharlal Nehru University, New Delhi.
7. Actively participated in the International Online Faculty Enrichment Programme on "**Tips & Tricks for Publishing in International Scientific Journals**" on June 20<sup>th</sup>, 2020 Organized by the Department of Zoology, Chemistry, Botany & Physics (Under DBT-Star College Strengthening Scheme, Govt. of India), Surendranath College, Kolkata.
8. Actively participated in Frontiers in Biological Sciences (Chapter IV), an international webinar on "**COVID 19- The current Scenario**" on 2<sup>nd</sup> and 4<sup>th</sup> July, 2020 , organised by the Department of Microbiology, St. Xavier's College (Autonomous), Kolkata, in collaboration with IQAC, St. Xavier's College (Autonomous), Kolkata.
9. Actively participated in the Invited Web Talk on Trends and Techniques in Computer Science, "**Data Migration-Heads and Tails**" on 4<sup>th</sup> July, 2020 at 11 A.M, organised by the Post Graduate Department of Computer Science, St.Xavier's College (Autonomous), Kolkata.
10. Actively participated in the one day national level workshop on "**Open Source Data Analysis Software and Graphical representation of Data**" on 04<sup>th</sup> July, 2020 organised by IT Club and IQAC of NSS Training College, Ottapalam.
11. Actively participated in the One day International webinar on **Geometry and Number Theory** on 28<sup>th</sup> August, 2020 organised by Bidhan Chandra College, Asansol.
12. Actively participated in the "**Introductory Seminar on Astrophysics and Cosmology**" held on 16<sup>th</sup> September, 2020 organized by IUCAA Centre for Astronomy Research and Development (ICARD) , Physics Department, North Bengal University.
13. Actively participated in the webinar on "**SANDPILES, ODOMETERS, MEMBRANE & RANDOM FORESTS**" on 17<sup>th</sup> October, 2020 organised by Department of Mathematics, St. Xavier's College (Autonomous), Kolkata.
14. Actively participated in the One day National webinar on **MATLAB and its applications** on 17<sup>th</sup> October, 2020 organised by Department of Mathematics, Kharagpur College, Paschim Midnapore.
15. Actively participated in National Level Teacher's Enrichment Workshop 2018 in Mathematical Sciences from 23<sup>rd</sup> May to 6<sup>th</sup> June 2018 , organized by the Calcutta Mathematical Society in joint collaboration with the (Indian) Mathematics Consortium Pune.

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

**17.** 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 1<sup>st</sup> October to 8<sup>th</sup> October , 2015.

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

**19.** 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 30<sup>th</sup> May 2012.

**20.** Participated in a 2-day seminar on “Mathematics and its Application” held on 22<sup>nd</sup> 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.

**8) Languages Known :** English, Bengali, Hindi.

**9) Computer Skills:** Good knowledge of C, C++ ; SPSS, Maple, Mathematica and Latex.

I hereby declare that all the facts stated by me are correct to the best of my knowledge.

*Tuhina Maurya*