CURRICULUM VITAE

Dr. Raghunath Patra, Assistant Professor, P.G. Department of Mathematics, Berhampur University, Bhanja Bihar
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1. **Date of Birth** : 12.05.1966

2. **Present Address** : Dr. RAGHUNATH PATRA
   Department of Mathematics
   Berhampur University
   Berhampur-760007, Orissa

3. **Permanent Address** : Dr. RAGHUNATH PATRA
   AT/PO: Dengadi
   VIA: Kankorada
   Dist.: Ganjam (Orissa)
   Pin:761144

4. **Current Position** : Assistant Professor (stage- III)

5. **Educational Qualification** :

Exam	University	Year	Subject
B.Sc.	Berhampur University	1986	Mathematics (Hons)
M.Sc.	Berhampur University	1989	Mathematics
Ph.D.	Berhampur University	2009	Relativity and Cosmology

6. **Expertise of work** : **Teaching:** Functional Analysis, Algebra, Operation Research, Fluid dynamics and Differential Equations.

   Research Area: Theory of Relativity & Cosmology

7. **Hobby/ Passion** : Reading & Spiritual activity

8. **Teaching Experience** :

Sl. No.	Name of the Institution	From	To
1	U.P. Sc. College, Sheragada, GM	04.09.1991	05.04.2011
2	Berhampur University	06.04.2011	Till Now

9. **Research Experience** : 20 years

10. Publications

1. **R. N. Patra, A Patra:** Bianchi Type-1 Cosmological Model With Time Varying **Λ,** American Journal Of Multidisciplinary Research And Development, Vol-5(6), pp 53-55, (2023)
2. **R. N. Patra:** Anisotropic Tilted Speherical False Vacuum Model, International Journal of Mathematics and Computer Research, 11(05), pg. no. 3420-3423, DOI-10.47191/ijmer/v11i5.05, (2023)
3. **R. N. Patra:** Some Physical Characteristics Of a Five-dimensional Mass Scalar Electromagnetic Cosmological Model, International Journal of Engineering Technologies and Management Research, Vol-10(4), pp 54-63, (2023).
4. **R. N. Patra:** Inhomogeneous Cosmological Perfect Fluid Models in Modified Theory of General Relativity With Time Dependent-Term, International Journal of Engineering Technologies and Management Research, Vol-10(3), pp 49-58, (2023).
5. **R. N. Patra**: Kaluza-Klein perfect fluid cosmological model in f(R,T) theory of Gravity, International Journal of Engineering And Science, Vol-13(2), pp130-134, (2023).
6. **R.N. Patra**, C.S. Otta, A.K. Sethi, R. R. Swain, B. Nayak: De-Sitter Model in $f(R,T)$ Theory of Gravity, Indian Journal of Natural Sciences,13(74), (2022)
7. M. Reza, A. Ranal, **R. N. Patra:** A Numerical Experiment on Thermo-fluidic Transport of Third-Grade Fluid Flow Through a Porous Microchannel Under the Influence of Combined Electromagnetohydrodynamic Effect**,** Advances in Mechanical Processing and Design.
8. M. Reza, A. Ranal, **R. N. Patra: "**Thermal performance for electromagneto hydrodynamic flow of non-Newtonian Casson fluid through porous microtube", IJET, 9(3), pp 804-811, (2020).
9. A. K. Sethi, B. Nayak &**R.N. Patra**: "String Cosmological Models with Bulk Viscosity in Lyra Geometry", Journal of Physics: Conf. Series 1344, ISSN-1742-6596, DOI-10.1088/1742-6596/1344/1/012001, (2019)**. (SCI-Indexed)**
10. **R. N. Patra &** A.K. Sethi: "Titled Bianchi –I Cosmological model with perfect fluid in Lyra Geometry with time varying term-Λ" *International Journal of Applied and computational Mathematics*, pp 5-94, (2019)   DOI- 10.1007/s40819-019-0664-5**.https://link.springer.com/article/10.1007/s40819-019-0664-5, (Scopus)**
11. A.K. Sethi, **R.N Patra,** B. Nayak: "Generalized Chaplygin Gas and Varying Bulk Viscosity in Lyra Geometry" International Journal of Physical and Mathematical Sciences, 13(11), (2019)
12. **R. N. Patra:** "BIANCHI TYPE-I UNIVERSE MODELS WITH CONSTANT DECELERATION PARAMETER IN LYRA GEOMETRY", *Journal of Applied Physical Science International, ISSN*-2395-5260, Vol-10(3), pp.151-154, (2018).
13. **R. N. Patra,** A. K. Sethi, B. Nayak, R. R. Swain**:** "Effect of dark energy on cosmological parameters with LVDP in Lyra manifold", *New Astronomy*, ISSN-1384-1076, Vol-66, PP.74-78(2018). DOI-10.1016/j.newast.2018.03.001). **(SCI- Indexed)**
14. **R. N. Patra**: "HOMOGENEITY IN ISOTROPIC SPHERICAL MACRO MODEL", *Journal of Applied Physical Science International, ISSN*-2395-5260, Vol-10(2), pp.86-91, (2018).
15. **R. N. Patra,** A. K. Sethi, R. R. Swain: "ANISOTROPIC LRS BIANCHI MODEL WITH PERFECT FLUID IN LYRA MANIFOLD", *Asian Journal of Mathematics and Computer Research*, ISSN-2395-4205 International Journal pp.174-182, (2018).

16. **R.N. Patra:** "Spherical Homogeneous Cosmological Model with conformally Invariant Scalar Field", *IJRASET, ISSN*-2321-9653, Vol-6(V), pp.2367-2375, (2018), DOI-10.22214/ijraset.2018.5388.

17. **R.N. Patra:** "Spherically symmetric space-time with magnetic field and zero mass scalar field", *IJMTT*, ISSN-2231-5373, Vol-54(1),pp.11-23, (2018). DOI-10.14445/22315373/IJMTT-V54P502.

18. Amrit Sorli, Santunu Ku Patra and **R.N. Patra**: "Relaticistic Rate of Clocks and stability of the Gravitational constant G*", IJRASET*, ISSN-2321-9653, Vol-6(1), pp.799-804, (2018), DOI-10.22214/IJRASET.

19. S.N. Tripathy, S.K. Kapat, **R.N. Patra** and S.K. Das: "A Comprehensive study of Malware Propagation using Geometric Progression".2017-International Conference on Computational Intelligence and Network,978-1-5386-2529-3/17/*IEEE,* pp.73-75, (2017). DOI-10.1109/CINE.2017.31(**SCOPUS**)

20. **Patra R.N.:** "String Cosmological Model in a New Scalar Tensor Theory of Gravitation", *International Journal of Mathematics Trends and Technology (IJMTT)*, ISSN:2231-5373, vol-48(2), pp.152-154, (2017).

21. **Patra R.N.:** "Anisotropic Cosmological Model of Cosmic String with Bulk Viscosity in Lyra Geometry", *International Journal of Mathematics Trends and Technology (IJMTT)*, ISSN:2231-5373, vol-48(2), pp.147-151, (2017).

22. **R.N. Patra**, A.K. Sethi: "Bianchi type –III bulk viscous cosmological models in presence of Chaplygin gas with time varying- Λ in Lyra Geometry". *International Journal of Pure and applied Physics*. ISSN:0973-1776, Volume-13, Issue-3(2017) pp.289-299, (2017)

23. **R.N. Patra**, R.C. Sahu, R.R. Swain: "Identification of Scalar Meson Field with Perfect Fluid in Bimetric Theory for a Spherically Symmetric Cosmological Model": *International Journal of Emerging Technologies in Engineering Research.* ISSN:2454-6410, Volume:3, Issue:3, pp.41-43, (2015)

24. S. N. Jena, **R. N. Patra**, R.R. Swain: "Existence of Stiff Fluid Model as a Coupling Effect of Perfect Fluid and Magnetic Field in Bimetric Relativity". *International Journal of Physics and Mathematical Science*, ISSN:2277-2111, Volume-5(3), pp.14-17, (2015)

25. S.N. Jena, **R.N. Patra** and R.R. Swain : "Non-Existence of String Cosmological Models in Presence of Magnetic Field in Bimetric Theory". *International Journal of Innovative Science Engineering and Technology. ISSN:*2348-7968, Volume-2, Issue-6, pp.721-727, (2015)

26. U.K. Panigrahi, **R.N. Patra** and Mita Sharma: "Vacuum Solution of Five Dimensional Plane Symmetric Metric in f(R) Theory of Gravity". *IOSR Journal of Applied Physics,* e-ISSN: 2278-4861, Volume-7, Issue-3, pp.1-4, (2015). DOI- 10.9790/4861-073XXXXX.

27. S.N. Jena, **R.N. Patra** and R.R. Swain: "Anisotropic Radiating Model As a Mutual Effect of Perfect Fluid, Cloud Massive String and Magnetic Field in Bimetric Relativity". *International Journal of Mathematical Research (IRPH),* ISSN:0976-5840 Volume-7(1) (2015) pp.69-73, (2015).

28. U.K. Panigrahi, **R.N. Patra** and MitaSharma : "Five Dimensional String Cosmological Models in Barber's Second Self Creation Theory". *International Journal of Physics and Applications.* ISSN:0974-3103, Volume-7(1), pp.31-37, (2015).

29. S.N. Jena, **R.N. Patra** and R.R. Swain : "Spherically Symmetric Inhomogeneous Macro Model Filled with Perfect Fluid". *International Journal of Innovative Science Engineering and Technology.* ISSN:2348-7968, Volume-2, Issue-4, (2015).

30. U.K. Panigrahi, **R.N. Patra** and Mita Sharma: "Higher Dimensional Spherical Symmetric Metric Models in a new Scalar Tensor Theory of Gravitation". *International Journal of Mathematics Research.*, ISSN: 0976-5840, Volume-7(1), pp. 1-6, (2015).

31. U.K. Panigrahi, **R.N. Patra** and Mita Sharma: "Five Dimensional Plane Symmetric Universe in Creation Field Cosmology", *The African Review of Physics, ,* 9:004, (2014)5.

32. U.K. Panigrahi, **R.N. Patra** and Mita Sharma: "Five Dimensional Spherical Symmetric Universe in Creation Field Cosmology", *African Review of Physics, 9:0036, (2014)*.

33. R.C. Sahu, **R.N. Patra**, B. Behera and B.K. Nayak: "Non-Static Plane Symmetric Magnetized Cosmological Models in Bimetric Theory of Gravitation", *The International Journal of Science & Technology*, ISSN: 2321-919X, Volume-2, Issue-7, pp. 164-170, (2014).

34. U.K. Panigrahi, **R.N. Patra** and Mita Sharma: "Five Dimensional String Cosmological Models in Lyra Manifold". *International Journal of Mathematical Archive*. ISSN:2229-5046, Volume-5, Issue-5, pp. 63-68, (2014).

35. R.C. Sahu, **R.N. Patra**, B.K. Nayak and B. Behera: "Binachi Type-I String Magnetized Cosmological Model in Bimetric Theory", *International Journal of Mathematical Archive*, ISSN: 2229-5046, Volume-5(7), pp. 97-103, (2014).

36. U.K. Panigrahi and **R.N. Patra**: "Relativistic Cosmological Mass Model", International Journal of Mathematical Archive-3(2), pp-471-476, (2012).

37. U.K. Panigrahi and **R.N. Patra**: "Bianchi type-I Homogeneous cosmological models in Einstein theory and modified theory of general relativity", International Journal of Physics and Mathematical Sciences, 2(1) pp-229-238, (2012).

38. **R.N. Patra**, and R.C. Sahu: "Bianchi Type-I Inflationary Models in General Relativity", Acta Ciencia Indica, Vol XXXVI M.No.1,9, (2010).

39. U.K. Panigrahi and **R.N. Patra**: "Plane Symmetric Inhomogeneous Macro Models", Acta Ciencia Indica, Vol XXXIV M.No.2,893, (2008).

40. U.K. Panigrahi and **R.N. Patra**: "Some Geometrical Aspects of the Space - Time", Science Journal of GVISH, Vol II, pp. 33-37, (2005).

41. U.K. Panigrahi**, R.N. Patra** and R.C. Sahu: "Plane Symmetric Inhomogeneous Micro and Macro Models", Science Journal of GVISH, Vol II, pp. 1-5, (2005).

11. **Collaborative Institute** : Foundation of Physics Institute, Slovenia

12. **Books**   : Some studies on Relativistic Cosmology , ISBN: 978-3-659-33555-6, LP-Lambart Academic Publishing, Germany

13. Google Scholar Citation

:https://scholar.google.com/citations?user=WmDSxK0AAAAJ&hl=en

14. Refresher Courses /FDP :

Sl. No.	Name of the Institute/ Organizer	Course	Duration
01.	Department of Mathematics, Sambalpur University, Jyoti Vihar	Summer Institute in Mathematics(U.G.C Sponsored)	15-06-1995 to 14-07-1995
02.	Department of Mathematics, Berhampur University, Bhanja Bihar-7	Second Refresher Course in Mathematics	24-05-1996 to 20-06-1996
03.	Department of Mathematics, Sambalpur University, Jyoti Vihar	Academic Refresher course	15-11-1998 to 12-12-1998
04	Savitribai Phule Pune University, Pune-411007	FDP(Earth & environment responses during Covid-19)	11-07-2020 to 17-07-2020
05.	Govt. Degree College, Bilaspur, U.P.	FDP (Teaching & Research Methodology)	18-07-2020 to 29-07-2020
06	Dr B R Ambedkar University Delhi Dr B R Ambedkar University Srikakulum	"Adopting to Online Teaching Learning Technology"	16-11-2020 to 07-12-2020
07	CEMCA & KISS-DU	Development Of Online Courses For Swayam	05-05-2022 to 20-05-2022
08	Teaching Learning Centre, Ramanujan College University of Delhi	Refresher Course In Mathematical Sciences	28-01-2023 to 11-02-2023
09	VELLORE INSTITUTE OF TECHNOLOGY, DU, CHENNAI	Current Trends And Methodologies IN AI & ML	13-03-2023 to17-03-2023
10	VELLORE INSTITUTE OF TECHNOLOGY, DU, CHENNAI	Emerging Trends Of Thermo Fluids In Energy System	17-06-2023 to 21-06-2023
11	VELLORE INSTITUTE OF TECHNOLOGY, DU, CHENNAI	Application Of Artificial Intelligence In Solving Various Engineering Probleams	23-06-2023 to 27-06-2023
12	Teaching Learning Centre, Ramanujan College University of Delhi	Refresher Course In Mathematical Sciences	01-09-2023 to 14-09-2023

14. Refresher Courses /FDP :

15. Details of Conference Organized :

Sl. No.	Name of the Conference	Topic	Duration
01	International Conference (U.G.C. Sponsored)	Analysis and Applications	July 20-21, 2012
02	International Conference (OHEPEE Sponsored)	Advanced Mathematical & its application	04-05 February, 2020

16. Papers presented in Conferences:

Sl. No.	Name of the Conference with Institution details	Title of the paper	Duration
01.	NCRTMAA-2010, Dept. of Mathematics, Berhampur University	Bianchi Type-I Inflationary Models in General Relativity	Dec 22-23, 2010
02.	ICAA-2012, Dept. of Mathematics, Berhampur University.	Spherically Symmetric homogeneous cosmological models with perfect fluid.	July 20-21, 2012
03.	NSRAP-2014, Dept. of Physics, Berhampur University.	Bianchi type-I homogeneous cosmological models in Einstein theory of Gen. relativity.	May 05-06, 2014
04.	U.G. C sponsored National Seminar, Chikiti Mahavidyalaya, Chikiti, Odisha	Five Dimensional Spherical Symmetric Universe in Creation Field Cosmology.	Sept 20-21, 2014
05.	UGC DST sponsored ICGR-2015, Dept. of Mathematics, Sant Gadge Baba Amravati University, Amravati	Anisotropic Cosmological Model of Cosmic string with Bulk Viscosity in Lyra Geometry.	Nov 25-28, 2015
06.	43rd Annual Conf. and National Seminar (ACTRWP-2016), OMS.	Non-Existence of String cosmological models in presence of Magnetic field in Bimetric theory.	Jan 16-17, 2016
07.	NSCTPP-2017, Dept. of Physics, Berhampur University	Existence of stiff fluid model as a coupling effect of perfect fluid and magnetic fluid in Bimetric Relativity.	Feb 11-12, 2017
08.	ACOMS 2020, NIST, Odisha	Effect of Dark Energy on Cosmological Parameters with LVDP in Lyra Manifold.	Feb 15-16, 2020

09.	ICAMAA-2020, Berhampur University, Odisha	Higher Dimensional Cosmological Model with string and Chaplygin Gas in Lyra' Geometry	4-5 Feb 2020
10.	NSRIAM-2K23, Berhampur University, Odisha	Bianchi Type-I Cosmological Model with Varying Λ	25-26 March , 2023

17. Invited talks:

Sl. No.	Name of the Seminar and Organized institution	Topic	Date
01.	"Recent Trends of Mathematical Science", Dept. of Mathematics, Science Degree College, Kukudakhandi, GM, Odisha	A memorial lecture on S.I. Ramanujan	22nd Dec 2017
02.	"Ramanujan Contributions on Mathematical Analysis and Number theory", Dept. of Mathematics, Gopalpur Degree College, Gopalpur, On-sea, GM	A memorial lecture on Mathematical Analysis and Number theory of S.I. Ramanujan	22nd Dec 2019

18. Conference/ Workshop attended :

Sl. No.	Name of the Conference with Organized Institution	Duration
01.	"77th Annual Conference of the Indian Mathematical Society(IMS)", Swami Ramanand Teerth Marathwada University, Nanded-4314 606, Maharastra	Dec 27-30, 2011
02.	"Annual conference of Odisha Mathematical society" at Vivekanand Institute of Technology, chhatabara, Bhubaneswar, Odisha	Feb 04-05, 2012
03.	"ICIMSC-2014" , School of Applied Sciences , KIIT University, Bhubaneswar	Jan 04-05, 2014
04.	"17th Odisha Bigyan congress" at ITER(SOA University) , Jagamara, Bhubaneswar	Dec 05-06, 2014
05.	"National Seminar on Advances in Mathematical Analysis and its applications" , Dept. of Mathematics, NIST, Berhampur	Dec 19-20, 2014
06.	"National Workshop on MATLAB for Mathematical Applications" IMA, Andharua, Bhubaneswar	Jan 22-23, 2017
07.	"National Seminar on Computational and Mathematical Engineering " , Department of Mathematics, PMEC, Sitalapalli, Berhampur	Feb 03-04, 2018
08.	"Maximize the Benefits of ProQuest for Academic Research and Learning" –Online conference	30 July, 2020
09.	"Workshop on NAAC" at Govt. P.G. College, Bilaspur, Rampur, UP	Aug 02-08, 2020
10.	"International webinar on Recent Developments in Number Theory-2020", Dept. of Mathematics, School of Applied Sciences, KIIT Deemed to be University, Bhubaneswar, Odisha	Aug 17-20, 2020
11.	"Workshop on Physics of the Early Universe" organized by IAGRG at ICTS, Bangalore	31-08-2020 to 03-09-2020

12.	"International Webinar Recent Trends in Geometric Function Theory and Applications-2020", Dept. of Mathematics, School of Applied Sciences, KIIT Deemed to be University, Bhubaneswar, Odisha	Sept. 18-21, 2020
13.	"INTERNATIONAL CONFERENCE ON MATHEMATICAL ANALYSIS AND APPLICATIONS & 50TH ANNUAL CONFERENCE OF OMS".	Jan. 21-22, 2023

19. Number of Ph.D. scholars supervised : Awarded- 03 (Three)

On-going -   03(Three)

20. Number of M.Phil./ Dissertation supervised : 10 (Ten)

21. University Administration Positions :

Sl. No.	Designation	Duration
01.	Deputy Centre Supervisor	2013-2014
02.	Assistant Director(DEC)	2014-2015
03.	Course Co-Ordinator of Mathematics (DEC)	2016-2018
04.	Co-Ordinator of Department of Mathematics	2017-2019
05.	Chairman, BOS of Math and Statistics	19.05.2018 to till now
06.	Assistant Controller of Examination, B.U.	01.02.2020 to 06.06.2022
07.	Co-Ordinator of University Higher Secondary School, Bhanja Bihar	12-02-2020 to 11-07-2022
08.	Assistant Superintendent, New Gents Hostels	23-09-2022 to 28-12-2022
09.	OIC Welfar, Berhampur University	14-10-2022 to till now
10.	Administrative Officer, PGC, BU	04-05-2023 to till now

22. Membership in Professional Bodies :

Sl. No.	Details
01.	Life Member of Indian Mathematical Society
02.	Life member of Odisha Mathematical Society
03.	Quarterly Franklin Membership, London Journal Press
04.	Life Member of Indian Association for General Relativity and Gravitation
05.	Executive Body Member of Odisha Mathematical Society

06.	Member of IQAC cell, Berhampur University
07.	Member of Editorial Board, Journal of Theoretical Physics
08.	Member, Board of Studies Rayagada Autonomous College, Rayagada

Raghunath Patra