

Dr. Sanjay Ramkrishna Bhojar

Designation

Assistant Professor in
Mathematics (H.O.D)

Qualification

M. Sc.(Maths), M.Sc. (Sub.
Comu.) B.Ed, M.Phil, Ph.D,

Title of Dissertation

Investigations of Existence and
Non-existence of n -type Plane
Gravitational Waves with
Massless Scalar Waves, Massive
Scalar Waves and
Electromagnetic Waves in
Higher Dimension.

Title of Thesis

Some Aspects of Plane
Symmetry in Geometrical and
Physical Sense.

Conferences attended

23

Workshops attended

07

Papers: Presented

(Conf./Sem./Workshops): 20
(15/05/00)

Published

International and National
Journals : 54

Any Other

- Reviewer of "International Journal of Theoretical Physics (IJTP)"(Journal No.10773), Impact Factor 1.188".
- Member of Editorial Board of "Scientific Journals International (SJI), USA".
- Life Member of "INDIAN MATHEMATICAL SOCIETY (IMS), Pune 411-007, India" (Membership No.B-11-118).

LIST OF PAPERS PUBLISHED IN JOURNALS (PEER REVIEWED/ UGC APPROVED)

Sr. No.	Title with page nos.	Journal	ISSN / ISBN No.	Whether PEER reviewed/UGC Approved	Impact Factor	No. of Co-authors	Whether you are the main author
	Deducing the metric of n						

1	dimensions for $Z = (z-t)$ –type waves in general theory of relativity.	Vidarbha Journal Of Science, II, 2005, pp21-24	ISSN-0973-8932	UGC APPROVED (44926)	Nil	3	yes
2	The Co-ordinate System In Which $g_{\alpha\alpha} = 0$ In n-Dimensional Space-Time For $Z = (z-t)$ Type Plane Gravitational Waves	Vidarbha Journal Of Science, Vol.1No.1,2006, pp54-60	ISSN-0973-8932	UGC APPROVED (44926)	Nil	3	yes
3	On The Line Element Of n-Dimensional Space-time For $Z = (t/z)$ Type Plane Gravitational Waves	Applied Science Periodical, IX (2), 2007, pp90-94.	ISSN-0972-5504	PEER REVIEWD	Nil	3	yes
4	Existence Of $Z = (t/z)$ Type Plane Gravitational Waves With Massless Scalar Waves And Electromagnetic Waves In Six Dimensional Space time	Vidarbha Journal Of Science, II (1), pp 38-45, 2007	ISSN 973-8932	UGC APPROVED (44926)	Nil	3	yes
5	Non-Existence Of Massive Scalar Wave With Gravitational Wave and Coupled With Gravitational And Electromagnetic Waves	Vidarbha Journal Of Science, II (1), pp 22-28, 2007	ISSN-0973-8932	UGC APPROVED (44926)	Nil	3	Yes
6	'The space-time P'	Vidrabha journal of Science, VOL.II, No.1, 2007, P.N.4-7	ISSN 0973-8932	UGC APPROVED (44926)	Nil	4	yes
7	Equivalency Of Anti symmetric Electro magnetic Field Tensor And Field Equation Fo $Z = (z-t)$ an $Z = (t/z)$ Type Waves In Five Dimensional Space-time	ActaCienciaIndica, Vol.XXXVM (3), 2009, Pp 1027-1031.	ISSN-0970-0455	UGC APPROVED (63906)	Nil	3	yes

8	The Co-ordinate System In Which $g_{aa} = 0$ For $Z = t/z$ Type Plane Gravitational Wave s in n-Dimensional Space-Time	Ganita vol.60 no.1. 2009, pp 1-7	ISSN 0046-5402	UGC APPROVED (17922)	Nil	3	yes
9	Plane wave-like solutions of Einstein-Maxwell equations with the co-existence of null Fluids and null currents in Peres space-time.	Journal of Vectorial Relativity, Venezualae vol.4 (2009)	ISSN 1856-6847	PEER REVIEWD	Nil	2	yes
10	Parity of Fii's and field equations for plane gravitational waves in higher dimensional space-time V_6	ActaCienciaIndic a, XXXVI -M(4), 2010, pp683-690	ISSN-0970-0455	UGC APPROVED (63906)	Nil	3	yes
11	Energy Momentum Pseudo Tensor For $Z = (t/z)$ Type Waves In Six Dimensional Space Time	Journal of Vectorial Relativity, JVR5(2010) 1, pp 58-66.	ISSN 1856-6847	PEER REVIEWD	Nil	3	yes
12	Existence of plane gravitational wave $Z = (t/z)$ carry some energy in Five Dimensional Space Time	Global Journal of Science Frontier, Vol.10 issue8,version1.0, pp20-29	ISSN 0975-5896	PEER REVIEWD	Nil	3	yes
13	The plane gravitational waves $Z=(z-t)$ with Energy Momentum Pseudo Tensor in Higher Dimensional space-time.	Vidarbha Journal Of Science, Vol.I, No.1, 2010.	ISSN-0973-8932	UGC APPROVED (44926)	Nil	3	No
14	Investigations of coupling of $Z = (z - t)$ - type plane fronted waves and electro-magnetic waves with mass less scalar plane waves and massive scalar waves in Peres space-time	Romania Reports in Physics, Romania , vol.62, no4. 2010.	ISSN 1221-1451 On-line ISSN 1841-8759	UGC APPROVED (23589)	IF 1.467	2	yes

15	The wave solutions of the field equations of general relativity in a generalized Takeno space-time for $z=(t/z)$ -type plane gravitational waves	'Prespacetime Journal, USA, , VOL.1, Issue 9, 2010, pp.1376-1386.)	ISSN 2153-8301	PEER REVIEWD	Nil	3	yes
16	Generalized Peres plane wavelike solutions in general projective relativity	Journal of Vectorial Relativity, VenezuelaE, Vol.5,(2010)	ISSN 1856-6847	PEER REVIEWD	Nil	3	yes
17	Some Geometric and physical properties of generalized Peres space time	Global Journal of Science Frontier Research, USA, Vol.10 2010 (5) ,27-31,).	ISSN 0975-5896	PEER REVIEWD	Nil	4	yes
18	Non-Existence of $Z = (t/z)$ -type Plane Gravitational Waves with Massive Scalar Waves and Electro magnetic Waves in Six-Dimensional Space-Time	Journal of Vectorial Relativity, Venezuelae Vol.5 (2)43-54 ,(2010)	ISSN 1856-6847	PEER REVIEWD	Nil	2	yes
19	On the Wave Solutions of the Field Equations of General Relativity in a Generalized Takeno Space-time for $Z=(t/z)$ -type Plane Gravitational Waves	Prespacetime Journal November 2010 Vol. 1 Issue 9 pp. 1376-1386	ISSN: 2153-8301	PEER REVIEWD	Nil	2	yes
20	Eigen values of six-dimensional symmetric tensors of curvature And weyl tensors for $Z=(z-t)$ -type plane fronted waves in Peres space-time	Romania Journal of Physics, Romania vol 56,no 1-2(2011) pp 38-44)	ISSN 1221-146X,	UGC APPROVED (22806)	IF 1.758	2	yes
21	The $z=(t/z)$ -type plane wave solutions of the field equations of general relativity in a plane symmetric space-time	'International Journal of Theoretical Physics', USA. Vol.50,pp.3467-3474, 0853-4, (2011).	ISSN 0020-7748,	UGC APPROVED (7689)	1.09	4	yes

22	The $z=(t/z)$ - type plane gravitational waves of non -symmetric unified field equations of Einstein, Bonner and Schrodinger in plane Symmetry	'Prespacetime Journal, USA, VOL.2, Issue 8, Aug .2011, pp.1195-1209	ISSN 2153-8301,	PEER REVIEWD	Nil	4	yes
23	Massive Mason Complex Scalar Waves Coupled with Gravitational and Electromagnetic Waves in Plane Symmetry	'Prespacetime Journal, USA, 11, Voul.2 ,2011 pp. 1700-1709	ISSN 2153-8301	PEER REVIEWD	Nil	3	yes
24	The Motion of Test Particle in $z=(t/z)$ -Type Plane Gravitational Waves in Plane Symmetry	Prespacetime Journal, USA, Vol.2 Issue 5 2011 pp. 651-655	ISSN 2153-8301	PEER REVIEWD	Nil	2	yes
25	Energy Momentum Pseudo -tensor In Higher Dimensional Space Time	Journal of Vectorial Relativity, 6,vol.1 (2011) pp. 37-45	ISSN 1856-6847	PEER REVIEWD	Nil	3	Yes
26	On the $Z=(t/z)$ - type solutions plane Gravitational waves of non -symmetric unified field equations of Einstein, Bonner and Schrodinger in a Generalized Takeno space-time	Prespacetime Journal, USA, , VOL.2, Issue 6, 2011, pp.762-783	ISSN: 2153-8301	PEER REVIEWD	Nil	3	yes
27	The $z=(t/z)$ -type plane gravitational waves of gauge invariant generalized field equations with asymmetric fundamental tensor in plane symmetry	'Romanian Journal of Physics' Romania (2012) Vol.57 Nos.7-8 pp. 1236-1251.	ISSN 1221-146X,	UGC APPROVED (22806)	IF 1.758	4	yes
28	Plane symmetric Null Fluids and null currents in General Relativity	IJMA(International Jurnal of Mathematical Archive)-Vol 2(12) ,2011pp. 2721-2725	ISSN 2229-5046	UGC APPROVED (47756)	IF 4.908 ICV 5.09	2	yes
	Plane wave solutions of weakened field equations in a plane	Prespacetime Journal, USA, , VOL.2, Issue	ISSN:	PEER			

29	symmetric space-time-II	13, 2011, pp.2060-2070.	2153 8301	REVIEWD	Nil	3	yes
30	The $Z=(t/z)$ -type plane Gravitational and Electromagnetic Waves with mass less scalar plane waves & Massive scalar waves in Plane Symmetry	Prespacetime Journal, USA, , VOL.2, Issue 9, 2011, pp.1377-1389	ISSN: 2153-8301	PEER REVIEWD	Nil	2	yes
31	$[x + y + z/\sqrt{3} - t]$ -type Plane Wave Solutions of Weakened Field Equations in General Relativity	Prespacetime Journal Jan. 2011, Vol. 2, Issue 1, pp. 033-041	ISSN 2153-8301	PEER REVIEWD	Nil	4	No
32	Generalized Line Element for $Z=t/z$ -Type Plane Gravi-tational Waves	Prespacetime Journal December 2011 Vol. 2 , Issue 12 pp. 1974-1977	ISSN: 2153-8301	PEER REVIEWD	Nil	4	No
33	Plane symmetric solutions of Einstein-Maxwell equations with the Co-existence Null fluids and Null currents	African Review of Physics 2011 Pp 161-163	ISSN 2223-6589	UGC APPROVED (12114)	IF 0.11	3	yes
34	The $z=(t/z)$ -type plane wave-like solutions of general relativistic field equations in generalized Peres space-time	African Review of Physics 2012 Pp 225-228	ISSN 2223-6589	UGC APPROVED (12114)	IF 0.11	2	Yes
35	Plane wave solutions of weakened field equations in a plane symmetric space-time-I	African Review of Physics 2012 Pp 219-224	ISSN 2223-6589	UGC APPROVED (12114)	IF 0.11	3	yes
36	Plane wave solutions of the field equations of general relativity-II	Romanian Journal of Physics' Romania (2012) Vol.64 Nos.4 pp. 933-944	ISSN 1221-146X,	UGC APPROVED (22806)	IF 1.758	3	yes
37	Generalized plane gravitational waves of non-symmetric unified	AAPP (AttidellaAccademiaPeloritana deiP ericolanti)	ISSN-1825-	UGC APPROVED		2	yes

	field theories in plane symmetry	Vol.90 No.2. (2012) pp A3-7	1242	(136)			
38	Energy momentum pseudo-tensors in n-dimensional space-time V_n	Prespacetime Journal, Feb. 2012 , Vol. 3 ,Issue 2, pp. 148-153	ISSN: 2153-8301	PEER REVIEWD	Nil	2	yes
39	Weakened field equations in general relativity admitting the “generalized plane symmetric” metric	International Journal of Mathematical Archive-3(4), 2012, Page: 1347-1353	ISSN 2229 – 5046	UGC APPROVED (47756)	IF 4.908 ICV 5.09	2	Yes
40	The $z=(z-t)$ -type plane gravitational waves of weakened field equations in plane symmetry	Adarsha Journal of Research and Evaluation (AJRE) 2012		PEER REVIEWD	Nil	2	yes
41	Non existence of plane gravitational waves with massive scalar waves and electromagnetic waves	International Journal of Physical, Chemical, and Mathematical Sciences Vol.2 No.1,2013 pp. 109-120	ISSN 2278-683X	PEER REVIEWD	IF 0.453 ICV 43.74	3	No
42	Five Dimensional Space-Time in General Relativity	International Journal of Statistika and Matematika, Volume 8, Issue 2, 2013 pp 54-56	ISSN: 2277- 2790 E-ISSN: 2249-8605,	UGC APPROVED (62572)	IF1.163 9ICV 53.48	3	No
43	Non-static Plane Symmetric Cosmological Model with Magnetized Anisotropic Dark energy by Hybrid Expansion Law in $f(R,T)$ gravity.	International Journal of Advanced Research Vol.3 Issue 9 pp. 492-500 Sept. 2015,	ISSN- 2320 5407	PEER REVIEWD	IF6.113 IC 56.43	3	yes
44	Plane Symmetric Universe With Λ in $f(R,T)$ Gravity	Prespacetime Journal Vol.6, Issue 11 pp. 1179-1197 Nov.2015	ISSN- 2153-8301	PEER REVIEWD	Nil	3	No
45	Cosmological Models with Linear equation of state in General Relativity	International Journal of Mathematics and Mathematical	ISSN	PEER			

		Sciences Vol.1 Issue.pp. 123-133 Dec. 2015	2454- 7271	REVIEWD	Nil	3	No
46	Physical Aspects of Bianchi Type Space- time with Quadratic Equation of State in $f(R)$ Gravity	PrespacetimeJour nal.March 2016 ,Volume7 Issue 3 , pp. 456-466	ISSN 2153- 8301	PEER REVIEWD	Nil	01	yes
47	Panchayat Raj aniDurbalGhatkanche Kalyan	Symposium on Panchayat Raj System and RuralDevelopmet (Feb 13, 2016)	ISBN 978-81- 923727- 1-6	PEER REVIEWD	Nil	01	yes
48	Thermo dynamical As- pects of Non-static Plane symmetric Uni- verse with in $f(R,T)$ Gravity Page No: 398-410	Indian Journal of Applied Research Vol. 6 Issue:11 November 2016	ISSN 2249- 555X	PEER REVIEWD	IF: 3.919 IC value 74.50	Nil	Yes
49	Non-static Plane sy- mmetric Scalar field cosmological model in Modified Theory of Gravity Page No: 30-33	Journal of Theoretical Physics and Cryptography Vol.12 December 2016	ISSN 2322- 3138	PEER REVIEWD	GIF: 0.898	Nil	Yes
50	Non-static Plane sy- mmetric Dark Energy model with linearly Varying deceleration parameter in Modified Gravity Page No: 05-09	Journal of Theoretical Physics and Cryptography Vol.13 March 2017	ISSN 2322- 3138	PEER REVIEWD	GIF: 0.898	Nil	Yes
51	Review of Impact of ICT in Socio-Economic Sectors Page No: 54-56	Vidyabharti International Research Journal April 2017	2319 4979	PEER REVIEWD	Nil	Nil	Yes
52	Stability of Acce- lating Universe with linear equation of state in $f(T)$ Gravity using Hybrid Expansion Law	Astrophysics Vol. 60,No.2, June 2017	0571- 7256	UGC APPROVED (1408)	IF 0.505	02	Yes
	Dark Energy Dom- inated Bianchi Type-	Prespacetime Journal.Sept.2017	ISSN-	PEER			

53	Vlo Universe With Hybrid Expansion Law in f(R,T) Gravity	, Volume8 Issue 9 , pp. 1101-1112	2153-8301	REVIEWD	Nil	03	Yes
54	Bianchi type-III cosmological model with Linear equation of state in f(R) Gravity	International Journal of Scientific Research in Science, Engineering and Technology Volume 3 ,Issue 6 ,October 2017 Pp: 835-839	Print ISSN: 2395-1990 Online ISSN : 2394-4099	UGC APPROVED (47147)	IF: 3.632 IC value 75.06	03	Yes

II. PAPERS PRESENTED IN CONFERENCES, SEMINARS, WORKSHOPS, SYMPOSIA.

Sr No	Title of the Paper presented	Title of Conference / Seminar	Organized by	Whether international / national /state / regional /college or university level
1	“Deducing the metric of n-dimensions for Z=(z-t)- type plane wave”	National Seminar On Recent Advances In Mathematical Physics.	DnyaneshMahavidyalaya , Nawargaon., (2004)	National Seminar
2	“Deducing the metric of n-dimensions for Z=(z-t)- type plane wave”	National Seminar On Recent Advances In Applied Mathematics	Dept. Of Applied Maths, Andhra University, Vishakapattanam (2004)	National Seminar
3	“Contribution (Nil) of Cosmological Constant λ in Higher Dimensional space-time.	International conference on Relativity2005	P.G.T.D.of Mathematics Amravati univerisity, (2005)	International Conference
4	Participated	National Seminar on Recent Advances in Physics and Mathematics	L.A.D.andSmt.R.P.College for Women, Nagpur (28 Jan .2006)	National Seminar
5	Generalized Peres Plane wave-like solutions in General Projective Relativity.	National conference on Recent Trends in Mathematics,	Department of Mathematics,G.V.I.S.H. Amravati.(2009)	National conference
6	“Generalized Plane Wave Solutions Of Weakened Field Equations In General	State level seminar on Recent Development in Relativity	Mahatma Fule college, Warud (2009)	State Level Seminar

	Relativity”			
7	“Geometric And Physical Properties Of Generalized Peres Space-Time”.	National Conference on Recent Trends in Mathematics and its Application in Astronomy.	Mungasaji Maharaj Mahavidyalaya, Darwaha (2010).	National Conference
8	“The $Z = (t/z)$ - Type Plane Wave Solutions of The Field Equations Of General Relativity In A Plane symmetric space-time.”	National conference on Developing Frontiers of Physics, Astronomy and Space Sciences	R.L.T College of Science , Akola (2010)	National Conference
9	“The $Z = (t/z)$ Type Plane Gravitational Waves of weakened field equation in plane symmetry	77 th Annual Conference of “Indian Mathematical Society” (IMS)	School of Mathematical Sciences S.R.T.M University Nanded .(2011)	National Conference
10	Five Dimensional Space-time in general Relativity	International conference on Mathematical Sciences (ICMS)	S.S.E.S.Amravati’s Science College ,Congress Nagar Nagpur (2012)	International Conference
11	Participated	State Level Seminar on Recent Advances in Applied Mathematics	Dayand Science College Latur (24-25 DecFeb..2012)	National conference
12	Generalized Plane Gravitational waves of Non symmetric Unified Field Theories in Plane Symmetry	National conference on Mathematical Sciences (NCMS)	Shri Dr. R.G. Rathod Arts & Science College Murtizapur Distt. Akola (M.S) (2013)	National Conference
13	Plane symmetrical some geometrical aspects of Space-time	National conference on Recent Trends in Mathematics	Gopikabai Sitaramji Gawande Mahavidyalaya Umarekhed (2013)	National Conference
14	Plane wave solutions of Generalized Einstein equation in a generalized Peres space time	National conference on Recent Trends in Mathematics, Physics & their Applications	Shankarlal Khandelwal Arts, Science & Commerce College, Akola (MS) (2014)	National Conference
15	Participated	National Conference on Libraries from Palm Leaf to	Phulsing Naik Mahavidyalaya, Pusad	National conference

		Palm Tips	(13-14 Dec.2014)	
16	Participated	102 nd Indian Science Congress Association(ISCA)	University of Mumbai ,Mumbai (3-7 Jan. 2015)	International conference
17	Panchayat Raj aniDurbalGhatkanch eKalyan	Symposium on Panchayat Raj System and Rural Development	Department of Political Science, PhulsingNaikMahavidyalaya,Pusad (Feb 13, 2016)	State Level
18	Dark Energy Dominated Bianchi Type-VI ω Universe With Hybrid Expansion Law in $f(R,T)$ Gravity	5 th International Conference on Quality Upgradation in Engineering Science and Technology (ICQUEST-16)	BapuraoDeshmukh College of Engineering & Technology, Sewagram (India). (April 12 , 2016)	International
19	Stability of Bianchi Type – Cosmological model in $f(R)$ Gravity with Linear equation of State	National Conference On Recent Advances in Mathematical Sciences (NCRAM-2016)	Department of Mathematics of SantGadgeBabaAmravatiUnive-rsity,Amravati (India). (June 17-18, 2016)	National
20	Bianchi Type- VI ω Wet Dark Fluid Cosmological Model With LVDP in $f(R,T)$ Gravity	3 rd Annual International Conference (TECHED-17)	TulshiramjiGaikwadPatil College of Engineering& Technology, Nagpur (India). (Feb 17-18 , 2017)	International
21	Review of Impact on ICT in Socio-Economic Sectors	State Level Seminar on “The Role of ICT in Quality Education”	Internal Quality Assurance Cell of M.S.P Arts, Science and K.P.T. Commerce College, Manora (India). (April 20,2017)	State level Seminar
22	Magnetized Anti-stiff fluid cosmological model with variable cosmological	20 th International conference of International Academy of Physical Sciences (CONIAPSXX)Hyderabad	Faculty of Science ,Osmania University, Hyderabad -500007 (July14-16 ,2017)	International Conference

	Constant			
23	Human Rights and Values in Education	UGC sponsored One day Multidisciplinary State Level Seminar on Human Rights and Duties Education	Arts and Commerce College, Bori Arab (M.S) (25 Sept. 2017)	State Level Seminar

II. REFRESHER COURSE /ORIENTATION COURSE.

Sr. No.	Programme	Duration	Organized by
1	29 th Orientation Programme	27/10/2014 To 22/11/2014	Academic Staff College of SantGadge Baba Amravati University Amravati (Maharashtra).
2	Refresher Course in Applied Mathematics and Statistics, Batch-XXXI	13/11/2015 To 03/12/2015	UGC-Human Resource Development Center, University of Madras, Chennai- 600005 (Tamilnadu).