Curriculum Vitae

Brief Profile: Dr. Prabal Singh Verma completed his B.Sc. from C.S.J.M. University Kanpur, M.Sc. (Physics) from Delhi University and received his Ph.D. (Physics) from Homi Bhabha National Institute, however, he carried out his Ph.D. work at Institute for Plasma Research, Gandhinagar under the direct supervision of Padma Shri *late* Prof. Predhiman Kaw. Dr. Verma worked as a Max-Planck Princeton Postdoctoral Fellow for four years at Technical University of Belin, Germany. Afterwards, he worked as a CNRS Researcher at Aix-Marseille University in France for more than a year before joining NIT Trichy. Nonlinear electrostatic plasma oscillations, higher-order numerical schemes for hydrodynamic problems, and nonlinear magnetorotational instability in astrophysical disks are his current areas of research interest. Dr. Verma has so far published 13 papers (including one Physical Review Letters and five single-authored) in international peer-reviewed journals.



1. Name: Dr. PRABAL SINGH VERMA

2. Designation: Assistant Professor

3. Office Address: Department of Physics, Room No. PH323

4. Telephone (Direct) (Optional):

Telephone: Extn (Optional):

Mobile (Optional):

5. Email (Primary): psverma@nitt.edu Email (Secondary):

prabal.singh.verma@gmail.com

6. Field(s) of Specialization: Plasma Physics

7. Employment Profile

Job Title	Employer	From	То
Assistant Professor	NIT Trichy, Tamil Nadu, India	18-06-2018	Present
CNRS Researcher	CNRS, Aix-Marseille University, France	01-03-2017	16-06-2018
Max-Planck Princeton Postdoctoral Fellow	Max-Planck/Princeton Center for Plasma Physics / TU Berlin Germany	05-12-2012	30-11-2016
Postdoctoral Fellow	Institute for Plasma Research, Gandhinagar, India	10-05-2012	04-12-2012

8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D.	IPR, Gandhinagar/ HBNI	2012	NA	Physics
M.Sc.	University of Delhi	2006	First	Physics
B.Sc.	C. S. J. M. University, Kanpur,	2004	First	Physics, Mathematics, Chemistry
Intermediate	U. P. Board	2000	First	Physics, Mathematics, Chemistry, English, Hindi
High School	U. P. Board	1998	First	Science, Mathematics, Biology, Social Science, English, Hindi

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	То

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	То

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2017	Relocation allowance of 3000	City of Marseille, France
	Euro based on academic excellence	
2012	International travel support	Department of Science &
		Technology, India
2006	CSIR NET (JRF)	CSIR-UGC, India

12. Fellowships

Year of Award	Name of the Fellowship	Awarding	From	То
		Organization	(Month/Year)	(Month/Year)
2012	Max-Planck Princeton	Max-Planck	12/2012	11/2016
	Postdoctoral Fellowship	Princeton		
		Center for		
		Plasma		
		Physics		
2006	Research Fellowship	IPR,	09/2006	05/2012
		Gandhinagar		
	_			_

- 13. Details of Academic Work
 - (i) Curriculum Development
 - (ii) Courses taught at Postgraduate and Undergraduate levels
 - (iii)Projects guided at Postgraduate level
 - (iv)Other contribution(s)

14. Details of Major R&D Projects

Title of Project	Funding Aganay	Dura	ation	Status
Title of Project	Funding Agency	From	То	Ongoing/ Completed

15. Number of PhDs guided

Name of the PhD	Title of PhD	Role(Supervisor/ Co-	Year of
Scholar	Thesis	Supervisor)	Award

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity 5th MPPC	Level of Event (International/ National/ Local) International	(Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by Max-Planck	Venue
January 12-15, 2016	Conference and Workshop	International	Speaker	Princeton Center for Plasma Physics	Berlin, Germany
December 07-09, 2015	MHD-Days Workshop	International	Speaker	TU, Ilmenau, Germany	Ilmenau, Germany
April 16- 20, 2012	International Workshop on Laser- Plasma Interaction at Ultra- High Intensity, Dresden	International	Paper presenter	Max-Planck Institute for the Physics of Complex System Research, Dresden, Germany	Dresden, Germany
October 29- November 2, 2012	54 th Annual Meeting of the APS Division of Plasma, USA	International	Speaker	American Physical Society	Providence, RI, USA
January 12-15, 2010	International Symposium On Waves, Coherent Structures & Turbulence in Plasmas	International	Paper presenter	Institute for Plasma Research, Gandhinagar	Gandhinagar
December 08-11, 2010	25 th National Symposium on Plasma Science and Technology	National	Paper presenter	Institute of Advance Studies in Science & Tech. (IASST) Guwahati	Guwahati

December	24 th	National	Paper	National Institute	Hamirpur
08-11,	National		presenter	of Technology,	
2009	Symposium			Hamirpur	
	on Plasma				
	Science and				
	Technology				

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event	Date (s)	Role	Venue
	(International/			
	National/ Local)			

18. Invited Talks delivered

Topic	Date	Inviting Organization
Breaking of longitudinal	October 14, 2016	Physical Research Laboratory,
relativistic plasma waves		Ahmedabad
and fourth order finite		
volume numerics for		
simulating accretion disks		
Fourth order accurate finite	October 10, 2016	Institute for Plasma Research,
volume numerics for		Gandhinagar
simulating accretion disks		
Physics of nonlinear	September 6, 2016	HZDR, Dresden, Germany
oscillations/waves in		
plasma and numerics of		
nonlinear MRI simulations		
Fourth-order accurate	January 15, 2016	5th MPPC Conference and
finite-volume numerics for		Workshop, Berlin, Germany
MRI simulations		
Study of nonlinear	August 16, 2012	IIT, Kanpur
oscillations and waves in		
plasma		

19. Membership of Learned Societies

Type of Membership (Ordinary	Organization	Membership No. with
Member/ Honorary Member / Life		date

Member)		
Life Member	Plasma Science	LM-734, 2007
	Symposium of India	

20. Academic Foreign Visits

Country	Duration of Visit	Programme		
France	15 Months (March	Worked as a CNRS Researcher at Aix		
	2017- June 2018)	Marseille University, France		
Germany	4 Years (December	Worked as a Postdoctoral Fellow at TU		
	2012 - November	Berlin, Germany		
	2016)			
USA	1 Week (October	International Conference		
	2012)			
Germany	1 Week (April	International Workshop		
	2012)			
Italy	Three Weeks	International Summer School		
	(August 2009)			

21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume	Page	Year	Impact
			(No.)	numbers		Factor of
						the
						Journal
						(Optional)
P. S. Verma	Lower-hybrid	<u>AIP</u>	8	035022	2018	1.568
	oscillations in a cold	<u>Advances</u>				
	magnetized electron-					
	positron-ion plasma					
P. S. Verma	A novel numerical	Physics of	25	032107	2018	2.115
	scheme for nonlinear	<u>Plasmas</u>				
	electron plasma					
	oscillations					
P. S. Verma,	Nonlinear	Physics of	24	112112	2017	2.115
T. C.	electrostatic	<u>Plasmas</u>				
Adhyapak	oscillations in a cold					
	magnetized electron-					
	positron plasma					

P. S. Verma	Generation of low frequency plasma waves after the wave- breaking	Physics Letters A	381	4005- 4010	2017	1.772
P. S. Verma, WC. Mueller	Higher order central schemes for multi- dimensional hyperbolic problems	Journal of Scientific Computing	73	1-29	2017	1.899
P. S. Verma	Nonlinear oscillations and waves in multi- species cold plasma	Physics of Plasmas	23	122125	2016	2.115
P. K. Kaw, S.Sengupta, P. S. Verma	Spatio-temporal evolution and breaking of Double layers: a description using Lagrangian hydrodynamics	Physics of Plasmas	19	102109	2012	2.115
P. S. Verma, S.Sengupta, P. K. Kaw	Residual BGK like waves after one- dimensional electron wave breaking in a cold plasma	Physical Review E	86	016410	2012	2.366
P. S. Verma, S.Sengupta, P. K. Kaw	Breaking of longitudinal Akhiezer-Polovin waves	Physical Review Letters	108	125005	2012	8.462
P. S. Verma, S.Sengupta, P. K. Kaw	Bernstein-Greene- Kruskal waves in relativistic cold plasma	Physics of Plasmas	19	032110	2012	2.115
P. S. Verma	Nonlinear oscillations and waves in an arbitrary mass ratio cold plasma	Physics of Plasmas	18	122111	2011	2.115
P. S. Verma, S.Sengupta, P. K. Kaw	Nonlinear evolution of an arbitrary density perturbation in a cold homogeneous unmagnetized plasma	Physics of Plasmas	18	012301	2011	2.115
P. S. Verma, J. K. Soni, S.Sengupta, P. K. Kaw	Nonlinear oscillations in a cold dissipative plasma	Physics of Plasmas	17	044503	2010	2.115

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of	Title of the	Page	Conference	Venue	Year
	Abstract/	Proceedings	numbers	Theme		
	Paper					

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of	Year of	ISSN/ISBN
		Publishers	Publication	Number