BIO-DATA

1. Name and full correspondence address: Prashant Manohar Gade,
   Dept. of Phy., RTM Nagpur University, Nagpur, 440033 India
2. Email(s) and contact number(s): prashant.m.gade@gmail.com,8806565119
3. Institution: Dept. of Phy., RTM Nagpur University, Nagpur.
4. Date of Birth: 10 May1965
5. Gender(M/F/T):M
6. Category Gen/SC/ST/OBC :Gen
7. Whether differently abled (Yes/No):No
8. Academic Qualification (Undergraduate Onwards)

	Degree	Year	Subject	University/Institution	%ofmarks
1.	HSC	1982	Phy.Chem Bio.Maths.	Mah. Board	63.5
2.	B.Sc.	1985	Phys.Chem.Maths	NagpurUniv.	67
3.	M.Sc	1987	Phy.	Nagpur Univ	65
4.	NET(JRF)	1988	Phy	UGC	
6	Ph.D.	1993	Phy.	PuneUniversity	

9. Ph.D.thesistitle,Guide'sName,Institute/Organization/University,YearofAward.:"Some Studies in Dynamical Systems",Prof. R. E. Amritkar, FASc, Pune University, 1993.
10. Work experience (in reverse chronological order).Teaching Experience asReader/Assoc.Prof. and Prof. 18+ yrs. As Asst Prof 2+ yrs..

S.N.	Positions held	Name of the Institute	From	To	Pay-scale
1	Sr. Prof.	Dept. of Phy., RTM Nagpur Univ.	June 23	-	
2	Professor(also Head Aug 14-July 19)	Dept.of Phy., RTM Nagpur Univ.	July09	June 23	37400-6700 AGP10000
3	Associate Professor	College of Engg. Pune	Feb.09	July09	16400-450-2000
4	Reader	Centre for Modeling and Simulation, Univ.of Pune	Aug.05	Feb.09	12000-420-18300
5	Lecturer	Centre for Modeling and Simulation, Univ. of Pune	Dec.03	Aug.05	8000-275-13500
6	Lecturer	BITS Pilani	Dec.01	Dec.02	800-275-13500

Research Positions: Pay-scale is not applicable.

S.N.	Position Held	Name of the Institution	PeriodFrom-To
1	Post-doc	Int.Centre for Theor. Phy.,Trieste, Italy	Oct.93toDec.95
2	Post-doc	Raman Research Inst., Bangalore.	Mar.96toApr. 96
3	Fellow	JNCASR,Bangalore.	Apr.96toDec.97
4	Visitor	Hong Kong Baptist Univ., Hong Kong.	Dec. 97 to May98
5	Visitor/post-doc	Academia Sinica,Taipei, Taiwan.	May98 toJan2000
6	Post-doc	OhioUniv., Athens, USA.	Feb2000 June2001
7	Visitor	Academia Sinica, Taipei, Taiwan.	July01, Sep.-Nov.01
8	Visitor	IMSc Chennai and Bharatidasan Univ.	2003

11. Publications*(List of papers published in SCI/SCOPUS Journals, in yearwise descending order).*

S. No.	Author(s)	Title and IF(if applicable)	Journal	Vol.	Page	Year
1	NR Sabe, SS Pakhare, & PM Gade	Synchronization transitions in coupled q-deformed logistic maps IF 7.8	Chaos, Solitons and Fractals	181	114703	2024
2	N. R. Sabe, P. D. Bhoyar & P. M. Gade	Synchronization transition in space-time chaos in the presence of quenched disorder IF: 3.4	Commun. Nonlinear Sci Numer. Simul.	In press		
3	P.M. Gaiki ,P. D. Bhoyar,D.D. Joshi & P.M. Gade	Existence of Multistability in the dynamical behavior of q-deformed Lozi map IF 1.778	Indian Journal of Physics	Mar	1	2024
4	P.M.Gaiki, A. D.Deshmukh, S. S.Pakhare & P. M.Gade	Transition to period-3 synchronized state in Coupled Gauss Maps IF3.741	Chaos	34	023113	2024
5	T.R. Sharma & P.M.Gade	Fractional order Neuronal maps: Dynamics, Control and Stability Analysis IF 2.699	Pramana	98	53	2024
6	S.Bhalekar & P. M.Gade	Fractional Order Periodic Maps: Stability Analysis and Application to The Periodic-2 Limit Cycles in the Nonlinear Systems IF 3.443	J. Nonlinear Sci.	33	119	2023
7	S.S.Pakhare & P.M.Gade	Dynamics and bifurcations in fractional Lozi map IF 0.33	Contemporary Mathematics	In press		
8	P.D.Bhoyar & P. M.Gade	Griffiths Phase for Quenched Disorder in Timescales IF 1.353	Int. J. Mod. Phys. C	Oct.	2450052	2023
9	M.C. Warambhe & P. M. Gade	Approach to zigzag and checkerboard patterns in spatially extended systems IF 9.922	Chaos, Solitons and Fractals	172	113510	2023
10	D.D. Joshi, S. Bhalekar & P.M. Gade	Controlling fractional difference equations using feedback IF 9.922	Chaos, Solitons and Fractals	170	113401	2023
11	T.R.Sharma, G. Rangarajan & P. M.Gade	Interpolation between Random walk and Self-avoiding walk by Avoiding Marked Sites IF 2.234	J. Stat. Mech. :Theory Exp.	2022	113203	2022
12	D.Joshi ,P.M. Gade & S. Bhalekar	Study of Low-dimensional Nonlinear Fractional Difference Equations of Complex Order IF3.741	Chaos	32	113101	2022
13	M.C.Warambhe, A.D.Deshmukh, P.M. Gade	Absorbing phase transition in a unidirectionally coupled layered network IF2.707	Phys. Rev. E	106	014303	2022
14	S.Bhalekar & P. M. Gade	Stability analysis of fixed point of fractional-order coupled map lattices IF 4.186	Commun. Nonlinear Sci. Numer. Simul.	113	106587	2022

15	S.Bhalekar, P.M. Gade & D Joshi	Stability and dynamics of complex order fractional difference equations IF 9.922	Chaos, Solitons and Fractals	158	112063	2022
16	P.D.Bhoyar, M. C. Warambhe, S. Belkhude,P.M. Gade	Robustness of directed percolation under relaxation of prerequisites: role of quenched disorder and memory IF 1.398	Eur.Phys.J. B	95	1	2022
17	S.S. Pakhare, S. Bhalekar & P.M. Gade	Synchronization in coupled integer and fractional-order maps IF 9.922	Chaos, Solitons & Fractals	156	111795	2022
18	N.D. Shambharkar, A. D.Deshmukh & P. M. Gade	Transition to Fully or Partially Arrested State in Coupled Logistic Maps on a Ladder IF 2.45	Int.J.of Bif. & Chaos	31	2150185	2021
19	P.M.Gade &S. Bhalekar	On fractional-order maps and their synchronization IF 4.555	Fractals	29	2150150	2021
20	A.A. Deshmukh, J.G. Bhatt, P. M. Gade, S.Pal	Investigation of structural evolution in the Cu–Zr metallic glass at cryogenic temperatures by using molecular dynamics simulations IF 2.172	J. of Mol. Modelling	27	286	2021
21	P.D.Bhoyar & P. M. Gade	The emergence of Logarithmic- periodic oscillations in Contact Process with the topological disorder IF 2.707	Phys. Rev. E	103	022115	2021
22	A.D. Deshmukh, N. D. Shambharkar & P.M.Gade	Effect of a mode of update on universality class for coupled Logistic maps :Directed Ising to Ising class IF 2.45	Int.J.Bif. & Chaos	31	2150042	2021
23	A.V. Mahajan, A.V.Limaye ,P. M.Gade,A.G. Banpurkar	Contact process on fractal clusters simulated by generalized diffusion-Limited aggregation(g-DLA)model IF 4.555	Fractals	28	2050137	2020
24	B.P.Rajvaidya, A.D. Deshmukh, P.M.Gade &G. G.Sahasrabudhe	Transition to coarse-grained order in coupled logistic maps: Effect of delay and asymmetry IF 9.922	Chaos, Solitons & Fractals	139	110301	2020
25	SS Pakhare, V Daftardar-Gejji, DS Badwaik, A Deshpande, PM Gade	Emergence of order in dynamical phases in coupled fractional gauss map IF9.922	Chaos, Solitons& Fractals	135	109770	2020
26	S.S.Pakhare & P.M.Gade	Novel transition to fully absorbing state without long-range spatial order in directed percolation class IF 4.186	Commun. Nonlinear Sci. Numer. Simul.	85	105247	2020
27	P.D.Bhoyar &P. M.Gade	Dynamic phase transition in the contact process with spatial disorder: Griffiths phase and complex persistence exponents IF2.707	Phys. Rev. E	101	022128	2020
28	N.D. Shambharkar & P.M.Gade	Universality of the local persistence Exponent for models in the directed Ising class in one dimension IF 2.707	Phys. Rev. E	100	032119	2019
29	A.D.Deshmukh, M.B.Matte & P. M.Gade	Emergence of Long Range Order for Sublattice Update in Coupled map Lattices IF1.398	Eur. Phy.J. B	92	185	2019

30	A.V.Mahajan, & P.M. Gade	Transition to Frozen Antiferromagnetic Pattern in Delayed Logistic MapIF2.45	Int. J. of Bif. and Chaos	29	1950066	2019
31	M.B. Matte & P. M.Gade	Criticality in a dynamics ruled evolutionary model IF4.186	Commun. Nonlinear Sci. Numer. Simul.	65	91	2018
32	P.M. Gaiki & P.M.Gade	Using a variation method to obtain the ground state of the quantum Hamiltonian: symbolic computation approach IF: 0.7	European Journal of Physics	40	015806	2018
33	A.A.Deshmukh, S.A.Kuthe, P. M. Gade, U.A.Palikundwar	Investigating the Applicability and Limitations of Glass-Forming Criteria Based on Bond Parameters on Thermal Stability in Mg-Based Multicomponent Bulk Metallic Glasses IF 1.391	Trans. of the Ind. Inst. of Metals	71	2631	2018
34	A.V.Mahajan, & P.M.Gade	Stretched exponential dynamics of coupled logistic maps on a small- world network IF: 2.234	J. Stat. Mech. :Theory Exp.	2018	023212	2018
35	M.B. Matte &P. M.Gade	Persistence as order Parameter in generalized pair-contact process with diffusion IF 2.234	J. Stat. Mech.: Theory Exp.	2016	113203	2016
36	B. L.Dutta & P. M.Gade	Transition to almost periodic patterns in circle map with delay: Persistence as order parameter IF 3.741	Chaos	23	033138	2013
37	P.M.Gade &G. Rangarajan	Frustration induced oscillator death on networks IF 3.741	Chaos	23	033104	2013
38	A.V.Mahajan, M.A.Saif &P.M. Gade	Dynamic transitions in Domany- Kinzel cellular automata on small- world network IF2.891	Eur. Phys. J. Spec, Top.	222	895	2013
39	P.M.Gade & G.G. Sahasrabudhe	Universal persistence exponent in transition to antiferromagnetic order in coupled logistic maps IF 2.707	Phys. Rev. E	87	052905	2013
40	U.Sarma, P.M. Gade &B.Saha	A mathematical model for dynamics of CD40 clustering	Syst. Synth. Biol.	7	197	2013
41	V. Daftardar-Gejji, SBhalekar & P Gade	Dynamics of fractional ordered Chen system with delay.IF: 2.219	Pramana	79	61	2012
42	A.R.Sonawane & P. M. Gade	Dynamic Phase Transition from Localized to Spatiotemporal Chaos in Coupled Circle Map with Feedback IF 3.741	Chaos	21	013122	2011
43	A.V.Mahajan & P.M.Gade	Transition from clustered state to spatiotemporal chaos in a small- world networks IF 2.707	Phys. Rev E	81	056211	2010
44	M.A. Saif & P. M.Gade	Dynamic Phase Transition in Prisoner's Dilemma on a Lattice with Stochastic Modifications	J. Stat. Mech. :Theory Exp.	2010	P03016	2010
45	M.A.Saif & P. M.Gade	Prisoner's Dilemma with Semi-synchronous Updates: Evidence for a First Order Phase Transition IF 2.234	J. Stat. Mech. :Theory Exp.	2009	P07023	2009
46	M.A. Saif &P. M.Gade	Effects of Introduction of New Resources and Fragmentation of Existing Resources on Limiting Wealth Distribution in Asset Exchange Models IF 3.778	Physica A	388	697	2009
47	P.M.Gade, D.V. Senthilkumar, S.	Power-law persistence characterizes traveling waves in coupled circle maps	Phys .Rev. E	75	066208	2007

	Barve &S.Sinha	with repulsive coupling IF 2.707				
48	M.A. Saif & P. M.Gade	Emergence of Power Law in a Market with Mixed Models IF3.778	Physica A	384	448	2007
49	D.N. Bankar, P.M.Gade, A.V. Limaye &A.G. Banpurkar	Segregation of fractal aggregates grown from two seeds IF 2.707	Phys. Rev. E	75	051401	2007
50	M.P. K.Jampa, A.R. Sonawane, P.M.Gade &S. Sinha	Synchronization in a network of model neurons. IF 2.707	Phys. Rev. E	75	026215	2007
51	P.M.Gade &C.-K.Hu	Scaling and Universality in Transition to Synchronous Chaos with Local-Global Interactions IF 2.707	Phys. Rev .E	73	036212	2006
52	P.M.Gade & S.Sinha	How Crucial is Small World ConnectivityforDynamics?IF2.45	Int. J. of Bif. and Chaos	16	2767	2006
53	P.M.Gade & S. Sinha	Dynamic Transitions in Small- World Networks: Approach to Equilibrium Limit. IF 2.707	Phys. Rev. E	72	052903	2005
54	E.R. Hunt, P.M. Gade & N. Mousseau	Stretched-Exponential Dynamics in a Chain of Coupled Chaotic Oscillators IF 1.958	Europhysics Letters	60	827	2002
55	P.M.Gade & C.-K.Hu	Synchronous Chaos in Coupled Map Lattices with Small-world Interactions IF 2.707	Phys. Rev. E	62	6409	2000
56	P.M.Gade & C.-K.Hu	Synchronization and Coherence in Thermodynamic Coupled Map Lattices With Intermediate-range Couplings IF 2.707	Phys. Rev. E	60	4966	1999
57	Z.Neda, A.Rusz, E. Ravasz, P. Lakdawala & P. M.Gade	Spatial Stochastic Resonance in One-dimensional Ising Systems IF 2.707	Phys. Rev. E (Rapid Comm.)	60	R3463	1999
58	P.M.Gade	Feedback Control in Coupled Map Lattices IF 2.707	Phys. Rev. E	57	6309	1998
59	P.M.Gade &M. P.Joy	Self Organized Criticality in Dynamics without Branching IF 2.707	Phys. Rev. E	57	5019	1998
60	P.M.Gade, R. Rai & H.Singh	Stochastic Resonance in Maps and Coupled Map Lattices IF 2.707	Phys. Rev. E	56	2518	1997
61	P.M.Gade	Synchronization of oscillators with Random Nonlocal Connectivity IF 2.707	Phys. Rev. E	54	64	1996
62	P.M.Gade &C. Basu	The Origin of Non-chaotic Behavior in Identically Driven Systems IF 2.6	Phys. Lett. A	217	21	1996
63	P.M.Gade,H.A. Cerdeira &R. Ramaswamy	Coupled Maps on Trees IF2.707	Phys. Rev. E	53	2478	1995
64	P.M.Gade & R. E.Amritkar	Wavelength Doubling Bifurcations in One-dimensional Coupled Logistic Maps IF 2.707	Phys. Rev. E	49	2617	1994
65	R.E.Amritkar & P.M.Gade	Wavelength Doubling Bifurcations in Coupled Map Lattices IF 9.161	Phys. Rev. Lett.	70	3408	1993
66	P.M.Gade &R. E.Amritkar	Spatially Periodic Orbits in Coupled Map Lattices IF 2.971	Phys. Rev. A	47	143	1993
67	P.M.Gade & R. E.Amritkar	Loss of Memory in a Chaotic Dynamical System IF 2.971	Phys. Rev. A	45	725	1992
68	R.E.Amritkar, P.	Stability of Periodic Orbits in Coupled	Phys. Rev. A	44	R3407	1991

	M.Gade, A.D. Gangal &V.M. Nandkumaran	Map Lattices IF2.971	(Rapid Comm.)			
69	R.E.Amritkar & P.M.Gade	Characterizing Loss of Memory in Chaotic Dynamical System IF 1.404	Int. J. Mod. Phys. B	5	2323	1991
70	P.M.Gade & R. E.Amritkar	Characterizing loss of memory in a dynamical system IF 9.161	Phys. Rev. Lett.	65	389	1990

Papers in un-indexed journals

1. P. D. Bhoyar and P. M. Gade, "Existence of Logarithmic-Periodic Oscillations in Contact Processes with Immunization" Rashtrasant Tukadoji Maharaj Nagpur University Science Journal 2023, 409
2. P. M. Gaiki and P. M. Gade, "Study of Persistence of Kinetic Ising Model of Glass Transition by Fredricson and Anderson" " Rashtrasant Tukadoji Maharaj Nagpur University Science Journal 2023, 247.

Conferences indexed in scopus.

S. No.	Author(s)	Title	Journal	Vol.	Page	Year
1	BP Rajvaidya, GG Sahasrabudhe, PM Gade	Universal exponents at critical line pertaining to second order phase transition in coupled logistic maps	AIP Conf. Proc.	2104	030025	2019
2	S S Pakhare, PM Gade, DS Badwaik	Dynamical phases in coupled q-deformed nonlinear maps	AIP Conf. Proc.	2220	130028	2020
3	ND Shambharkar, PM Gade	On the transition to the antiferromagnetic pattern in Coupled logistic lattice in 2- dimensions	AIP Conf. Proc.	2220	130054	2020
4	P M Gaiki, PM Gade	Coupled map lattice on diffusion Limited aggregate: Dynamics on a random fractal	AIP Conf. Proc.	2220	130056	2020
5	MC Warambhe, PM Gade	On Properties of Non-Markovian RandomWalk in One Dimension	J. Phys.: Conf. Ser.	1913	012004	2021
6	S.Pakhare,K Rahangdale, PM Gade	Synchronization in coupled integer and fractional-order gauss map	J. Phys.: Conf. Ser.	1913	012001	2021

Book Chapter

"Coupled Map Lattice Model for Edwards-Wilkinson Growth class": P.M.Gaiki and P.M.Gade, Futuristic Trends in Physical Sciences Volume 3 Book 5 , (IIP Series 2023)

"Stability Analysis of Fractional Order Maps: A Review" S.Bhalekar and P.M.Gade (submitted)

Editor, Referee: Review editor for "Frontiers in Complex Systems" and "Frontiers in Applied Mathematics and Statistics". Referee for several journals.

Preprints under review in various journals :7(With N.Sabe, D.D.Joshi,S. Bhalekar).

Conference publications under review : 2 (with P. D. Bhoyar, M. C. Warambhe)

Technical Reports:

1) M. Arjunwadkar, A. Parvate, S. Barve, P. M. Gade, D. G. Kanhere, S. Chowdhary, D. Bankar, and A. Kshirsagar Master of Technology (M.Tech.) in Modeling and Simulation. Public DocumentCMS-PD-20070223

2) D.G.Kanhere, M.Arjunwadkar, A.Parvate, S,Barve, & P.M.Gade, Centre for Modeling and Simulation: Excellence in Academics, Research, and Outreach (2003-07 Interim Report Submitted to the UGC) . Public Document CMS-PD-20070316

3) M.Arjunwadkar, D.G.Kanhere, & P.M.Gade, Advanced Diploma Programme in Modeling and Simulation. Public Document CMS-PD-20050502 All documents are available at http://cms.unipune.ac.in/reports/

Research Students

Ph.D.awarded:1)Dr.Mohammad Ali Saif(Currently at Univ .of Amran, Amran Yemen)
2) Dr.Abhijeet R.Sonawane(Currently at Harvard Medical School, USA)
3) Dr.Vartika Singh(Currently PDF,NPL,Delhi)
4) Dr.Bharati Patil (Currently at Rajiv Gandhi Col. of Engg. & Research, Nagpur)
5) Dr.Maneesh B. Matte(Currently at R.M.G .Arts & Science Col., Nagbhid)
6) Dr.N.D.Shambharkar (VidyaVikas Arts, Commerce & Science Col., Samudrapur)
7) Dr. B.P. Rajvaidya (G.H.Raisoni Col. of Engg.) (Guide:G.G.Sahasrabudhe,co-guide: PMG):

Ph.D.submitted:1)Pratik Gaiki (Shri Shivaji Arts, Commerce and Science College, Motala)

M.Phil.awarded:1)Dr. Bhagat Lal Dutta (IFREMER,LaTremblade, France)

Ph.D.registered:1)Manoj Warambhe(CSIRJRF,RTMNU) 2) Divya Joshi(JRF) 43Naval Sabe 4)Trupti Sharma

Project Students:1)Dr.Ashwini V.Mahajan (2008-11) (XcaliberInfotech) 2) A.D.Deshmukh(2018-21) (Research Fellow- SPPU)3) Divya Joshi (2021-)

Projects:

Sr. No.	Funding Agency	Title of the Project	Total Amount Sanctioned	Fro m	To
1	BCUD, Pune Univ.	University Project	3,00,000	2006	2008
2	DST,New Delhi	Behavior of Spatially Extended Dynamical Systems on Networks.	10,14,000	2007	2011
3	DBT,New Delhi	CD40 Clustering on Membrane and perturbation by Leishmania by B. Saha(PI) and P. M. Gade (co-PI)	8,25,000 (Independently allotted to RTMNU)	2010	2014
4	RTMNU	Dynamic Phase Transitions in Coupled Map Lattices	1,80,000	2015	2017
5	DST	Dynamical Phases and Phase Transitions in Spatially Extended Systems	21,15,520	2017	Apr.21
6	DST	Phase Transitions in Spatially Extended Dynamical and Stochastic Systems	24,11,464	31 Dec. 2020	30-6-24

12. Administrative Experience: HoD, Dept of Physics from Aug. 2014-July 2019. I also worked as Chairman, Board of Studies in Physics. I was instrumental in framing new syllabus in physics which is in force now. I worked on other committees such as computer, technical, furniture, purchase committees, and local enquiry committees to various colleges. I work on BoS for Ramdeobaba Kamala Nehru Engg. College, (RKNEC) and Institute of Science, Nagpur.
13. Conferences/Workshops organized : I was coordinator for refresher course in IT applications twice. (06-02-12 to 26-2-12 and 01-10-15 to 21-10-15)
14. Any Other information
    1. Paper55^{th} in the list has292citations, paper 61^{th} has 116 citations(Total:1287h-index:18).This was well received. For example Abrams et al wrote in Chaos 26, 094601 (2016) that "Another important paper at this time was by Prashant Gade [35],who looked at much more complicated networks of randomly coupled maps."
    2. I was offered the post of Associate Professor by IIT(Indore) in2009.
    3. I was offered a postdoctoral position/Adjunct Asst. Prof. post by Univ. Of Memphis (USA) in 2002, Spanish Ministry of culture in 1998 etc. I was offered postdoctoral fellowships in several countries. I could not accept or join these offers for various reasons.
    4. I held National Merit Scholarship.
    5. I was selected as Best Research Scholar by Indian Physics Association (Pune Chapter).

Honors/Awards:1.Elected as Fellow, Maharashtra Academy of Sciences.
2. Two certificated of honor by RTMNU for valuable contributions in research.