CURRICULUM VITAE OF KAVITA JAIN

August 8, 2022

Theoretical Sciences Unit
Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR),
Bangalore, India
https://www.jncasr.ac.in/jain/

CURRENT RESEARCH INTERESTS

Theoretical Population Genetics

Adaptive dynamics of microbial populations; evolutionary dynamics of complex traits; evolution of genetic systems— in particular, mutation rates and sex and recombination.

Nonequilibrium Statistical Physics

Slow quench dynamics of classical systems

EMPLOYMENT

since 2019	Professor, Theoretical Sciences Unit, JNCASR, Bangalore
2013-2019	Associate Professor, Theoretical Sciences Unit, JNCASR, Bangalore
2007-2013	Faculty Fellow [1], Theoretical Sciences Unit, JNCASR, Bangalore

VISITING POSITIONS AND OTHER AFFILIATIONS

2014/09-11	Visiting Fellow, Centre for Advanced Studies, LMU Germany
2014/08	Visitor, International Centre for Theoretical Physics, Trieste, Italy
2013-2015	Associated Faculty, International Centre for Theoretical Sciences (ICTS), Bangalore
2012-2016	Member, National Network on Mathematical and Computational Biology, Bangalore

EDUCATION

1992-1995	B.Sc.(H) in physics, Miranda House, University of Delhi
1995-1997	M.Sc. in physics, University of Delhi
1997-2003	Ph.D. in theoretical physics, Tata Institute of Fundamental Research, Mumbai
2003-2005	Postdoctoral Fellow, University of Köln, Germany
2005-2007	Postdoctoral Fellow, Weizmann Institute of Science, Israel

[1] also at Evolutionary and Organismal Biology Unit

OTHER PROFESSIONAL ACTIVITIES

Advisor	1 Masters, 5 Ph.D. students (graduated), 1 postdoc
	4 Ph.D. students (current)
Editor	Associate Editor, Evolution (2022-24)
	Associate Editor, Genetics (since 2020)
	Guest Editor [2], Journal of Statistical Physics (2017)
	Co-editor, international physics journal EPL (2015-2022)
Organizer[3]	'Bridging population and quantitative genetics', KITP, Santa Barbara (2022)
	Biennial 'Bangalore School on Population Genetics and Evolution', ICTS, Bangalore (since 2014)
	Annual 'Indian Statistical Physics Community Meeting', ICTS Bangalore (since 2014)
Referee	Several physics and biology journals
	International research grant proposals in biology
	Ph.D. theses in physics and biology
Institute service[4]	Nodal Officer, Gender Advancement for Transforming Institutions [GATI] (2021-22)
	Coordinator, Int PhD program in Material Science (2019-2022)

RECENT PUBLICATIONS

1. K. Jain and S. Kaushik. *Joint effect of changing selection and demography on the site frequency spectrum.* Theoretical Population Biology 146, 46–60 (2022)

2. S. Kaushik and K. Jain. *Time to fixation in changing environments.* Genetics, iyab 148 (2021)

3. Priyanka, S. Chatterjee and K. Jain. *Slow quench dynamics in classical systems: kinetic Ising model and zero-range process.* J. Stat. Mech. 033208 (2021)

For a complete list, see arXiv and bioRxiv

RECENT TALKS

Outreach talk on Randomness in biological evolution
Research talk on Polygenic adaptation in finite populations
Introductory lectures on Stochastic modeling in evolution

[2] Special issue on 'Statistical Physics of Biological Evolution'
[3] selected list
[4] selected list