CURRICULUM VITAE   Pankaj Vishe

CONTACT
INFORMATION

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EMPLOYMENT

Durham University	Professor in Pure Mathematics	07/2024 to present.
Durham University	Associate Professor in Pure Mathematics	05/2020- 06/2024.
Durham University	Assistant Professor in Pure Mathematics	10-2015- 05/2020.
University of York	Postdoctoral research associate	02-2013- 10-2015.
KTH, Stockholm	Göran Gustafsson postdoc	09/2011 - 01-2013.
MPIM, Bonn	Visiting researcher	01/2011-08/2011.
EPFL	Visiting researcher	09/2010-12/2010.

UNIVERSITY
EDUCATION

Ph.D.   New York University   07/2010.
Pure Mathematics (Advisor - Akshay Venkatesh)

M.Math.(Hons.)   Indian Statistical Institute, Bangalore, India   06/2005
Grade: 80% aggregate with Distinction.

B.Math.(Hons.)   Indian Statistical Institute, Bangalore, India   06/2003
Grade: 83% aggregate with Distinction.

RESEARCH
INTERESTS

My research interests are in Analytic Number Theory, Diophantine Geometry, Dynamics on Homogeneous spaces, Computational number theory, and interplay between them.

PUBLICATIONS

(With Tim Browning and Shuntaro Yamagishi) *Rational curves on complete intersections and the circle method*, under review,(arXiv:2404.11123).

(With Matt Northey) *On the Hasse Principle for Complete Intersections*, to appear in Compositio Math.

Rational points on complete intersections over $\mathbb{F}_q(t)$, Proceedings of the LMS 126(2): 556-619.

A sparse equidistribution result for $(\mathrm{SL}(2,\mathbb{R})/\Gamma_0)^n$. Transactions of the American Mathematical Society 375(1): 669-694.

(With Andreas Strömbergsson), *An effective equidistribution result for* $\mathrm{SL}(2,\mathbb{R}) \ltimes (\mathbb{R}^2)^{\oplus k}$ *and application to inhomogeneous quadratic forms*, recommended for publication with minor edits at Journal of the LMS, arXiv:1811.10340..

(with Oscar Marmon), *On the Hasse Principle for quartic hypersurfaces*, Duke Math J, Volume 168, Number 14 (2019), 2727-2799.

(With Tim Browning), *Rational curves on smooth hypersurfaces of low degree*, Algebra and Number Theory 11 (2017), 1657-1675.

(With Alex Gorodnik), *Simultaneous Diophantine approximation — logarithmic improvements*, Transactions of the American Mathematical Society., 370 (1). pp. 487-507.

(With Tim Browning), *Cubic hypersurfaces over $\mathbb{F}_q(t)$*, GAFA 25 (2015), 671-732.

(With James Tanis), *Uniform bounds for period integrals and sparce equidistribution*, Int Math Res Notices, 2015(24): 13728-13756.

(With Tim Browning), *A version of the circle method over number fields*, Duke Math. J. 163 (2014), no. 10, 1825-1883.

A fast algorithm to compute $L(1/2, f \times \chi_q)$, Journal of Number Theory, Vol. 133, No. 5, 05.2013, p. 1502-1524.

Rapid computation of L-functions for modular form, Int Math Res Notices, vol 2013, no. 11, pp. 2624-2656., 10.1093/imrn/rns112.

PhD students	Dr. Matthew Northey (Graduated 2022).
Admin duties	Head of the departmental Equality and Diversity committee, Durham University Fall 2018-Present.
	Member of the departmental Athena Swan committee, Durham University Fall 2017-Present.
	Organiser of the Arithmetic Study Group, Durham, Spring 2018-Present.
	Organiser of Number theory seminar, University of York, Spring 2014-Summer 2015.
Teaching and academic responsibilities	Single Maths B (For Physicists and Engineers) Durham Fall 2023.
	Topics in Algebra and Geometry IV/V, Durham Spring 2023, 24.
	Number Theory III, Durham Spring 2021.
	Codes and Cryptography III, Durham Fall 2020, 21, 22.
	Algebra II, Durham Fall 2018, 2019, 2020.
	Codes and Cryptography III, Durham Spring 2018.
	Algebra II, Durham Fall 2017.
	Codes and Cryptography III, Durham Spring 2017.
	Number Theory III/IV, Durham Fall 2016.
	Representation theory III/IV, Durham Fall 2015.
	Functional Analysis, University of York (main instructor) Fall 2014.
	Co-ordinator of the Number theory study group, University of York, 2014-2015.

	Functional Analysis, University of York (main instructor)	Fall 2013.
	Co-ordinator of the DNA seminar, KTH,	01/2012-01/2013.
	Short lecture series on Introduction to the circle method, KTH	Nov 2011.
	Short lecture series on Algorithms to compute L-functions, EPFL	Nov 2010.
	Complex analysis (grader) NYU	Spring 2009.
	Real analysis 2 (grader). NYU	Fall 2008.
	Q.R.: Math patterns in nature (main instructor) NYU	Spring 2008.
	Q.R.: Probability, statistics and decision making. (TA) NYU	Fall 2007.
	Q.R.: Probability, statistics and decision making (TA) NYU	Spring 2007.
	Q.R.: Elemantary statistics (TA) NYU	Fall 2006
	Calculus for social sciences (TA) NYU	Spring 2006.
CONFERENCES ORGANISED	New directions in Rational Points. BIRS CMI, Chennai India, January 2024.	
	Durham Symposium 2023: Spectral Gaps. Durham University Aug 2023.	
AWARDS, FELLOWSHIPS	Henry McCracken fellowship- full Ph.D. Fellowship, New York University,	06/2005-06/2010.
	Batch topper for M. Math (Hons.),	2005.
	Full tuition waiver with stipend, Indian Statistical Institute,	2000/2005.
	Batch topper for B. Math (Hons.),	2003.
	Visiting Student, Tata Institute of Fundamental Research, Mumbai,	07/2002, 2003 and 08/ 2004.
Languages	English, Marathi, Hindi (Native), Spanish (Fluent).	