Visakh Narayanan
vishakhme@gmail.com
www.visakhnarayanan.wordpress.com

- Status: Assistant Professor, Department of Mathematics and Statistics, Newman College Thodupuzha
- Interests: Low Dimensional Topology, Algebraic topology, Knot Theory, Topological Quantum Field Theories and Topological data analysis.
- Hobbies: Cinema, Music, Reading, and Badminton, Computer programming.

Academic Record

Education

- Ph.D. Mathematics under the supervision of Prof. Rama Mishra, from Indian Institute of Science Education and Research, Pune, Maharashtra (2017-2023).
- BSMS dual degree from Indian Institute of Science Education and Research, Pune, Maharashtra (2012-2017).
- Higher Secondary Education in Electronics from St.George Higher Secondary school Muthalakodam, Idukki, Kerala (2012).
- High School Education from DePaul English Medium Higher Secondary school, Thodupuzha, Idukki, Kerala (2010).

Achievements

- Awarded the DST-INSPIRE PhD fellowship (2018-2023).
- Awarded the DST-INSPIRE scholarship, while pursuing BSMS dual degree (2012-2017).
- Founded IISER Pune Linux Users Group in 2014 in IISER Pune.
- Secured A+ grade in all subjects for Kerala state 12^{th} standard examinations, (2012).
- Secured 98% in Kerala state SSLC examinations (2010).

Publications

- ***Knots and non-orientable surfaces in 3-manifolds*** (Alessia Cattabriga, Paolo Cavicchioli, Rama Mishra and Visakh Narayanan) ; Accepted for publication in Contemporary mathematics, Knot theory and Applications.
- ***Knots in RP3.*** (Kauffman, Louis H., Rama Mishra, and Visakh Narayanan.) Topology and its Applications (2025): 109656..
- ***Virtual Knots and Projective Knot Homology.***, Visakh Narayanan, In Proceedings of the International Conference on Knots, Quivers and Beyond (ICKQB 2025), p. 89. Springer Nature, 2025.
- ***Geometry of knots in real projective*** 3***-space*** (Rama Mishra and Visakh Narayanan), Journal of Knot Theory and Its Ramifications 32, no. 10 (2023): 2350068..
- ***Plat closures of spherical braids in*** $\mathbb{R}P^3$ (Rama Mishra and Visakh Narayanan), preprint arXiv:2304.08954 (2023).

Experience

Experience

- Post Doctoral Fellow at IISER Mohali, from 15 December 2023 to 14 December 2025, mentored by Dr. Shane D'Mello.
- Assistant Professor (On contract), 01 June 2026, Newman College Thodupuzha.

Teaching Assistantships

- Point Set Topology, Fall 2016.
- Introduction to proofs, Spring 2017.
- Linear Algebra, Fall 2018.
- Single Variable Calculus, Spring 2019.

- Set theory and logic, Fall 2024
- Probability and Statistics, Spring 2025

Talks and Seminars

- Speaker at the conference "*Knots, Quivers and Beyond*" in February 2025 at IIT Bombay.
- Speaker at the conference on "*Knots and Related topics*", celebrating the 60^{th} birthday of Prof. Rama Mishra, in October 2024 at IIT Ropar.
- Taught a mini course (4 lectures) on "*Quantum Topology*" in "Student Talks on Trending Topics in Theory (ST4 2024)" workshop organized by Physics students all over India, in July 2024 at IIT Bombay.
- Speaker at IISER-NISER Maths meet 2024, in June 2024 at IISER Thiruvananthapuram.
- Speaker at a webinar in International Math Circle on "*Knots and representation theory*", organized by V. O Manturov, I.M. Nikonov and Seongjeong Kim on 15 January 2024 online.
- Attended an International conference on "*Low Dimensonal Topology*" in September 2023 at IISER Pune.
- Attended a workshop titled "*Geometry, Analysis and Mathematical Physics*" in June 2023 at NISER Bhubaneswar.
- Speaker at the International workshop "*Volume conjecture and related topics in Knot theory*" in December 2018 at IISER Pune.
- Attended International conference of The Indian Mathematics Consortium in cooperation with American Mathematical Society in December 2016 at Banaras Hindu University.