Harshit Yadav

Contact Information	Work address	University of Alberta Department of Mathematics Edmonton AB T6G 2G1 ,Canada		
	Phone Email	(780) 818-1758 hyadav3@ualberta.ca		
Personal Information	Birth date and location: November 13, 1995; Gurdaspur, Punjab, India Citizenship: India			
Employment	University of Alberta Max-Wyman Assistant Professor		Aug. 2023 -	
Education	Rice University Ph.D. in Mathematics - Advisor: Professor Chelsea Walton		July 2020 - May 2023	
	University of Illinois at Urbana-Champaign M.S., Ph.D in Mathematics - Advisor: Professor Chelsea Walton		August 2017 - July 2020	
	Indian Institute of Technology, KanpurMay 20Bachelor of Science, Mathematics		May 2017	
Research Interests	Tensor categories, fusion categories, Hopf algebras, Frobenius algebras, topological quantum field theory			
Honors and Awards	 2022 - Nettie S. Autrey Fellowship (Rice University). 2020 - Program Associate at MSRI for the Quantum Symmetries program. 2013 - Secured All India Rank 1876 in IIT Advanced. 2013 - Secured All India Rank 209 in JEE Mains 2013 among 1.65 million candidates. 2012 - KVPY fellowship (All India Rank 142). 			
Publications and Preprints	(7) On unimodular module categories Advances in Mathematics, 432, 109264 (2023).			
	(6) Frobenius monoidal functors from (co)Hopf adjunctions, Proceedings of the AMS, 152, no. 2, 471-487 (2024).			
	(5) On non-counital Frobenius algebras , with A. Hernandez and C. Walton, <i>Journal of Algebra and its Applications</i> , 2550018 (2023).			
	(4) Filtered Frobenius algebras in monoidal categories, with C. Walton, International Mathematics Research Notices, rnac314 (2022).			
	(3) The ABCDs of Schubert calculus , with C. Robichaux and A. Yong, <i>Séminaire Lotharingien de Combinatoire</i> , B85a (2020).			
	 (2) Equivariant cohomology, Schubert calculus, and edge labeled tableaux, with C. Robichaux and A. Yong Facets of Algebraic Geometry: A Volume in Honour of William Fulton's 80th Birth- day, LMS Lecture Note Series, Vol. 2 (2022), Cambridge University Press, 284–335. 			
	(1) Autoequivariant Network Search via Group Decomposition, with S. Basu, A. Magesh and L. R. Varshney,			

 $\verb"arxiv:2104.04848", presented at SIAM Conference on Mathematics of Data Science$ (MDS24), Atlanta, GA, 21-25 October 2024.

INVITED AND	Rigidity of VOAs and Hopf extensions				
Contributed Talks/Posters	• Mini-workshop, Shanghai Jiao Tong University	June 2024			
	• AMS sectional, San Antonio	Sept 2024			
	Rigidity of extensions				
	• SLmath, Quantum Symmetries seminar	July 2022			
	• VOA, tensor categories and related topics, Shanghai	June 2024			
	• CMS summer meeting, U. Saskatchewan	May 2024			
	• Fields Institute, Toronto	March 2024			
	On unimodular module categories				
	• BIRS, Banff	December 2023			
	• Rocky Mountain representation theory seminar	October 2023			
	• Mathematical Physics Seminar, Perimeter Institute,	September 2023			
	• Mathematical Physics seminar, University of Hamburg	June 2023			
	• Shibaura Algebra Seminar, SIT, Japan	May 2023			
	• AMS sectional meeting, University of Cincinnati	April 2023			
	• Seattle Noncommutative Algebra Day	March 2023			
	• Quantum symmetries program, CRM Montreal	Oct 2022			
	• AMS fall sectional meeting, University of Utah	Oct 2022			
	On non-counital Frobenius algebras				
	• Categories and Companions Symposium	Sept 2022			
	\bullet Hopf algebras, monoidal categories and related topics	July 2022			
	• Graduate Algebra Symposium, UT Arlington	April 2022			
	• Seattle Noncommutative Algebra Day (virtual)	March 2022			
	Filtered Frobenius algebras in monoidal categories				
	• Quantum Groups Seminar (virtual)	July 2022			
	• Algebra seminar, Indian University	April 2022			
	• Algebra seminar, Texas A&M University	March 2022			
	• Quantum algebra seminar, Ohio State University	March 2022			
	• Seattle Noncommutative Algebra Day (virtual)	May 2021			
	• AMS Spring sectional (virtual)	March 2021			
Evpoqueopy	Hopf algebras and Quantum Symmetries				
TALKS	Sominar at Coogle X	November 2021			
	- Johnmar at Google A November 2021				
	Introduction to Topological Quantum Field Theories				
	• Current Mathematics Seminar, Rice University	October 2021			
	Various reading group talks at Rice, UIUC	2019-2022			
Mentoring	Andrii Smutchak, Sofiia Breslavets (MIT Yulia's dream program) Topic: Double groupoids and weak Hopf algebras [final report]	2023-2024			
	Amanda Hernandez (Rice University) Topic: (Weak) Hopf algebras and (quasi) Frobenius algebras [pape	2021-2022 er]			

TEACHING	University of Alberta Instructor	Math 228: Winter, spring a	nd fall 2024		
	Rice University Grader Grader Teaching Assistant (Recitation)	Math 357: Spring 2022 Math 356: Fall 2020, Fall 2 Math 302: Spring 2021	021		
	 University of Illinois at Urbana-Champaign Teaching Assistant (Recitation)[†] Math 241, Calculus 3: Fall 2017, Fall 2018, Spring 2019, Fall 2019 Math 231, Calculus 2: Spring 2018 † = On the list of teachers ranked outstanding 3 times, ranked excellent 1 time. 				
Service	Mini-workshop on VOAs, UoA Co-organizer		Feb, March 2024		
	Aspects of Mathematical Physics Seminar, UoA Co-organizer		Winter 2024		
	Graduate Student Panelist, Rice University Gulf Coast Undergraduate Research Symposium		October 2021		
	Algebra-Geometry-Combinatorics Seminar, UIUC Co-organizer		2018-19		
	Counselling service, IIT Kanpur Student guide		2014-15		
Conferences and Schools	VOA, tensor categories and related topics Shanghai Jiao Tong University, China		June 2024		
	CMS summer meeting University of Saskatchewan, Saskatoon		May 2024		
	New directions in conformal field Theory Field Institute, Toronto		March 2024		
	Symmetric Tensor Categories and Representation Theory IPAM, UCLA		Jan 2024*		
	Subfactors and Fusion 2-categories BIRS, Banff, Canada		Dec 2023		
	Algebraic and Combinatorial methods in Representation The ICTS, Bangalore, India		y Nov 2023		
	AMS Spring Sectional Meeting University of Cincinnati, Ohio		April 2023		
	Quantum symmetries: Tensor categories, TQFTs, Vertex alge CRM, Montreal, Canada		as October 2022		
	AMS Fall Sectional Meeting Salt Lake City, Utah	October 2022			
	AIM: Higher categories and topological order San Jose, California		September 2022		
	Categories and Companions Symposium		September 2022^*		
	Hopf algebra, monoidal categories and related topics		July 2022*		

Graduate Algebra Symposium UT Arlington, Texas	April 2022*
Mathematical Congress of Americas	July 2021*
AMS Spring Sectional Meetings	March, April 2021*
Joint Math Meetings	Jan 2021, April 2022*
Seattle Noncommutative Algebra Days U. of Washington, Seattle	Feb 2020, Dec 2020 [*] , May 2021 [*] March 2022 [*] , March 2023
Introductory Workshop: Quantum Symmetries MSRI, Berkeley	Feb 2020
Connections for Women: Quantum Symmetries MSRI, Berkeley	Jan 2020
Quasy-Con UIUC	November 2019
Quantum Symmetries summer school Universidad de los Andes	June, July 2019
OSU Summer research program on quantum sym Ohio State University	ametries June 2019
ALGECOM 16 Loyola University	May 2019
Combinatorics and beyond University of Michigan	November 2018
Representation Theory, Combinatorics, and Geor University of Virginia	metry October 2018
Summer school on Algebraic group actions McMaster University	June 2018
OSU workshop on Schubert Calculus Ohio State University	May 2018
ALGECOM 16 University of Michigan	March 2018

*= attended virtually