

# Chirantan Mukherjee

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CONTACT INFORMATION	Department of Mathematics University of Western Ontario 1151 Richmond Street, Middlesex College London, ON, Canada, N6A 5B7	mukherjeechirantan.github.io/ cmukher@uwo.ca
RESEARCH INTERESTS	Algebraic topology, homotopy theory, and category theory- especially higher category theory	
EDUCATION	<b>University of Western Ontario, Canada</b> Ph.D. in Mathematics, Sep. 2022–Anticipated Aug. 2026 <ul style="list-style-type: none"><li>• Advisor: Dan Christensen</li></ul> <b>University of Trento, Italy</b> M.Sc. in Mathematics, Sep. 2019–Mar. 2022 <ul style="list-style-type: none"><li>• Dissertation Topic: Complete Segal Spaces as a model of Higher Categories</li><li>• Advisor: Nima Rasekh</li></ul> Erasmus+ Study in University of Warsaw, Poland. <b>Institute of Mathematics and Applications, India</b> B.Sc. in Mathematics and Computing, Aug. 2015–Apr. 2018 <ul style="list-style-type: none"><li>• Dissertation Topic: Set Theory and Foundation of Mathematics</li><li>• Advisor: Shashi Mohan Srivastava</li></ul>	
PUBLICATIONS	<b>Preprint</b> Mar. 2022	Chirantan Mukherjee. <i>Twisted Arrow Construction for Segal Spaces</i> . arXiv preprint, 2022. arXiv:2203.01788.
RESEARCH EXPERIENCE	2021–2022 2017–2018	École Polytechnique Fédérale de Lausanne, Switzerland. Indian Statistical Institute, Kolkata, India.
TALKS AND PRESENTATIONS	Jul. 2022 Jun. 2022 Mar. 2021 Jan. 2021 Dec. 2020 Nov. 2020	<i>Complete Segal Spaces as a Model of Higher Categories</i> , GROOT Summer Seminar 2022, University of Notre Dame, US. <i>Higher Category Theory</i> , Indian Statistical Institute, Kolkata, India. <i>The <math>Conf_2</math> space of rational homology of <math>S^3</math> and propagators</i> , University of Warsaw, Poland. <i>Differentiable manifolds and forms, de Rham cohomology</i> , University of Warsaw, Poland. <i>Products and cochains of equivariant cohomology theories</i> , University of Warsaw, Poland. <i>Polish spaces</i> , University of Warsaw, Poland.
GRANTS AND AWARDS	2021–2022 2020–2021	Thesis Research Abroad, University of Trento, Italy, €2,700. Erasmus+ Grant, Italian Erasmus+ Agency, Italy, €6,207.

RESEARCH SCHOOLS AND INTERNSHIPS ATTENDED	2022	<i>Higher Category Lecture</i> , Australian National University, Australia. Instructors: Yuki Maehara
	2021	<i>Masterclass on Topological Field Theories and Factorization Homology</i> , University of Copenhagen, Denmark, €336.07+ €469.69. Instructors: Adrien Brochier; Quantum character varieties and TFTs, and Claudia Scheimbauer; Dualizability, higher categories and TFTs.
	2021	<i>EPFL Topology Seminar Spring 2021</i> , EPFL, Switzerland. Seminar on algebraic topology and category theory.
	2021	<i>Intensive Research Programme: Higher Homotopical Structures</i> , CRM, Spain. Development of higher-categorical tools for theory and computations in algebraic K-theory and related theories.
	2020	<i>Scuola Matematica Interuniversitaria</i> , University of Perugia, Italy Instructors: Barbara Nelli; Differential geometry, and Frédérich Robert; Functional Analysis.
	2017	<i>Summer Research Programme</i> , IMSc, India, ₹11,000. Advisor: Pralay Chatterjee
	2017	<i>Project on basic set topology</i> , ISI, Kolkata, India. Advisor: Goutam Mukherjee
TEACHING EXPERIENCE	Jun. 2017	<i>Regional Mathematical Olympiad Training Camp</i> Train junior mathematical olympiad 2016 awardees for mathematical olympiad.
	Jun. 2017	<i>Training Camp for Pathani Samanta Mathematics Scholarship</i> Nurturing of talents in mathematics from rural India.
	May 2016	<i>Training Camp for Pathani Samanta Mathematics Scholarship</i> Nurturing of talents in mathematics from rural India.
	2015–2018	<i>Sunday Morning Problem Solving Classes</i> Interactive classes for school children, with emphasis on children from vernacular schools.
TECHNICAL SKILLS	Languages:	C/C++, Java
	Softwares:	L <sup>A</sup> T <sub>E</sub> X, Mathematica, Octave
RELEVANT SKILLS	Languages:	English (Fluent), Bengali (Native), Hindi (Native)
	Extra:	Poet (Published a book of poems), Swimmer and Life Guard