MICHAEL LAMBERT

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EMPLOYMENT

Mount Allison University Sept. 2021-ongoing Postdoctoral Research Associate University of Massachusetts-Boston Sept. 2020-ongoing Associate Lecturer of Mathematics **Dalhousie University** Sept. 2014-Oct. 2019 Graduate Student University of Missouri-Columbia Aug. 2011-May 2014 Graduate Student Instructor

EDUCATION

Dalhousie University 2014-2019 PhD Mathematics Supervisor: Dorette Pronk Thesis: "An Elementary Account of Flat 2-Functors" University of Missouri-Columbia 2011-2014 MA Mathematics Supervisor: Calin Chindris University of Vermont 2009-2011 MS Mathematics Supervisor: Richard Foote Dartmouth College 2004-2007 BA English Literature, Philosophy

PAPERS

- "Discrete Double Fibrations" Theory and Applications of Categories, 37(22), 2021.
- "A Topos View of Blockchain Consensus Protocols" Submitted to Compositionality 2021 preprint: arxiv.org/abs/2111.07461
- "Discrete 2-Fibrations" Submitted to Higher Structures 2020 preprint: arxiv.org/abs/2001.11477
- "Representation Embeddings of Cartesian Theories" Submitted to Applied Categorical Structures 2019 preprint: arxiv.org/abs/1612.02497

Other Preprints:

• "Double Categories of Relations" 2021 preprint: arxiv.org/abs/2107.07621

- "A 2-Site for Continuous 2-Group Actions" 2019 preprint: arxiv.org/abs/1911.05141
- "Computing Weighted Pseudo-Colimits" 2019 preprint: arxiv.org/abs/1711.05903
- "An Elementary Account of Flat 2-Functors"
 2019 Dalhousie University PhD Thesis
 DalSpace Link: dalspace.library.dal.ca/handle/10222/75671
- "Undecidability of the Theory of $k\langle X, Y \rangle$ -Modules" 2014 University of Missouri-Columbia MA Thesis

TALKS

Improvements to 'Double Categories of Relations'

AtCat Seminar, Dalhousie University, 8 February 2022

Blockchain Safety in a Topos

Ottawa Logic Seminar, University of Ottawa, 2 December, 2021

A Topos View of Blockchain Safety

AtCat Seminar, Dalhousie University, 16 November, 2021

Discrete Double Fibrations

CT20→21, University of Genoa, 30 August, 2021

Characterizing Double Categories of Relations

Applied Category Theory 2021, Cambridge University, 16 July 2021

Discrete Double Fibrations

Peripatetic Seminar, University of Calgary, 12 February 2021

A 2-Site for Continuous 2-Group Actions

CMS Summer Meeting, University of Regina, 10 June 2019

A Site for Continuous Group Actions

AtCat Seminar, Dalhousie University, 5 March 2019

Exactness of an Internal Colimit Functor for 2-Categories

AtCat Seminar, Dalhousie University, 20 November 2018

The Calculus of Fractions in a Cosmos of Internal Categories

Octoberfest 2018, City College CUNY, 28 October 2018

Diaconescu's Theorem for 2-Toposes of Stacks

Category Theory 2018, University of Azores, 13 July 2018

A Tensor Product of Fibrations as a Codescent Object

CMS Summer Meeting 2018, University of New Brunswick, 4 June 2018

Flat Category-Valued Pseudo-Functors

AtCat Seminar, Dalhousie University, 30 January 2018

Principal Bundles and Torsors as Flat Functors

AtCat Seminar, Dalhousie University, 28 November 2017

Pseudo-Functors, Generalized Principal Bundles, and Torsors

Octoberfest 2017, Carnegie Mellon University, 28 October 2017

Generalizing Principal Bundles

Category Theory 2017, University of British Columbia, 18 July 2017

Wild Algebras in Cartesian Categorical Logic

TACL 2017, Prague, Czech Republic, 30 June 2017

Representation Embeddings of Cartesian Theories

AtCat Seminar, Dalhousie University, 10 Jan 2017

Representation Embeddings of Algebraic Theories

Union College Mathematics Conference, Union College, 3 December 2016

AWARDS

Nova Scotia Graduate Scholarship \$30,000 CAD, Dalhousie University	2014-2017
AARMS Student Travel Award Homotopy Type Theory Workshop The Fields Institute, University of Toronto \$1,000 CAD	June 2016
AARMS Student Travel Award AARMS Summer School 2014, Dalhousie University, \$650 CAD	July 2014
Excellence in Teaching Award 2013-2014 Mathematics Department University of Missouri-Columbia	April 2014

COURSES TAUGHT

As Instructor

Math 134: Calculus for Management, University of Massachusetts-Boston Math 129: Precalculus for Management, University of Massachusetts-Boston

Math 141: Calculus II, University of Massachusetts-Boston Math 2002: Intermediate Calculus II, Dalhousie University Math 1100: College Algebra, University of Missouri-Columbia

As Teaching Assistant

Math 1000: Calculus I, Dalhousie University Math 1010: Calculus II, Dalhousie University

Math 1290: Engineering Mathematics II, Dalhousie University, Math 1280: Engineering Mathematics I, Dalhousie University

Math 1500: Calculus I, University of Missouri-Columbia