

Luís Alexandre Meira Fernandes Alves Pereira

University of Notre Dame
Department of Mathematics
Notre Dame, IN 46556

Email: lpereira@nd.edu
Homepage: <http://www.faculty.virginia.edu/luisalex/>

- Research interests**
- Algebraic topology. Homotopy theory. Operads. Koszul duality of operads. Goodwillie Calculus. Equivariant homotopy theory. Equivariant operads. Equivariant dendroidal sets.
- Education**
- Ph.D. in Mathematics 2013
Massachusetts Institute of Technology
Thesis title: Goodwillie calculus and algebras over a spectral operad
Advisor: Mark Behrens
 - Mestrado em Matemática Aplicada e Computação 2008
Instituto Superior Técnico
Advisor: Rui Loja Fernandes
 - Licenciatura em Matemática Aplicada e Computação 2006
Instituto Superior Técnico
- Positions**
- Mary Ann Pitts Postdoctoral Fellow Fall 2013-Spring 2017
University of Virginia
 - Visiting Assistant Professor Fall 2017-Spring 2018
University of Notre Dame
- Publications**
- *Equivariant dendroidal sets*
<https://arxiv.org/abs/1702.08119>
(53 pages; to appear in *Algebraic & Geometric Topology*)
 - *Operad bimodules and composition products on André-Quillen filtrations of algebras* (joint with Nick Kuhn)
Algebraic & Geometric Topology, vol.17(2), 2017, pp.1105-1130
 - *Cofibrancy of operadic constructions in positive symmetric spectra*
Homology, Homotopy and Applications, vol.13(2), 2016, pp.133-168
- Submitted**
- *Genuine equivariant operads* (joint with Peter Bonventre)
<https://arxiv.org/abs/1707.02226>
(83 pages; submitted to *Advances in Mathematics*)
- Preprints**
- *Graph stable equivalences and operadic constructions in equivariant spectra* (joint with Markus Hausmann)
<http://www.faculty.virginia.edu/luisalex/research.html>
 - *Filtrations of colored operadic constructions and excisiveness of truncated operadic functors*
<http://www.faculty.virginia.edu/luisalex/research.html>
 - *Goodwillie calculus in algebras over a spectral operad*
<http://www.faculty.virginia.edu/luisalex/research.html>
 - *A general context for Goodwillie Calculus*
<https://arxiv.org/abs/1301.2832>

Research Talks

- *Genuine equivariant operads*
Fall 2017 at University of Kentucky
- *Genuine equivariant operads*
Summer 2017 at University of Illinois at Urbana-Champaign
- *A (equivariant) tree description of (genuine equivariant) operads*
Spring 2017 at University of Virginia
- *Genuine equivariant operads*
Spring 2017 at University of Louisiana
- *Genuine equivariant operads*
Fall 2016 at Notre Dame University
- *Genuine equivariant operads*
Fall 2016 at University of Virginia
- *N_∞ -operads and equivariant trees*
Spring 2016 at Johns Hopkins University
- *N_∞ -operads and equivariant trees*
Spring 2016 at University of Virginia
- *Cofibrancy of operadic constructions in spectra*
Fall 2014 at University of Virginia
- *Goodwillie Calculus in algebras over a spectral operad*
Fall 2014 at Ohio State University
- *Goodwillie Calculus in algebras over a spectral operad*
Fall 2014 at University of Virginia
- *Goodwillie Calculus in algebras over a spectral operad*
Spring 2013 at Massachusetts Institute of Technology
- *Goodwillie Calculus in algebras over a spectral operad*
Fall 2012 at University of Chicago

Teaching Experience

- Calculus A Fall 2017
- Math 1320 Spring 2017
Calculus II
- Math 1310 Fall 2016
Calculus I
- Math 8850 Spring 2016
Topics in Algebraic Topology
- Math 3351 Spring 2015, Fall 2015
Linear Algebra
- Math 3100 Spring 2014, Fall 2014, Spring 2015, Summer 2015, Fall 2015
Introduction to Probability Theory
- Math 2310 Fall 2013
Multivariable Calculus

Advisory experience

- part of the Ph.D. Thesis Dissertation Committee for Peter Bonventre
Spring 2017 at University of Virginia

**Community
service**

- organized the Topology Seminar
Fall 2018 at Notre Dame University
- administered an RGT grant
Fall 2018 at Notre Dame University

**Schools and
focused periods**

- MIT Talbot Workshop on *Calculus of Functors*
Garden City, UT

Spring 2012