

Pedro Tamaroff

Curriculum Vitæ

Room 0.1, Hamilton Building
School of Mathematics
Trinity College Dublin, Ireland

Current position: Phd Student
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Research interests

Homological algebra, homotopical algebra, algebraic homotopy, effective homology, higher structures, operads, representation theory, combinatorics.

In preparation

- (1) *Homotopy quotients of generalized non-commutative Batalin–Vilkovisky operads.*

Publications

- [10] *The Tamarkin–Tsygan calculus of an associative algebra à la Stasheff.* [arXiv:1907.08888](https://arxiv.org/abs/1907.08888)
To appear at [Homol. Homotopy Appl.](#)
- [9] *Endofunctors and PBW theorems.* [arXiv:1804.06485](https://arxiv.org/abs/1804.06485)
Published at [Int. Math. Res. Not. rnz369](#), with V. Dotsenko.
- [8] *Minimal models for monomial algebras.* [arXiv:1804.01435](https://arxiv.org/abs/1804.01435)
To appear at [Homol. Homotopy Appl.](#)

Preprints

- [7] *Tangent complexes and the Diamond Lemma.* [arXiv:2010.14792](https://arxiv.org/abs/2010.14792)
With Vladimir Dotsenko.
- [6] *Differential forms on smooth operadic algebras.* [arXiv:2010.08815](https://arxiv.org/abs/2010.08815)
With Ricardo Campos.
- [5] *Resolutions of algebraic operads coming from Koszul (bi)algebras.* To appear.
Draft available upon request.
- [4] *A spectral sequence for tangent cohomology of algebraic operads.* [arXiv:2008.00876](https://arxiv.org/abs/2008.00876)
Submitted for publication, with J. M. Moreno–Fernandez.
- [3] *Derived Poincaré–Birkhoff–Witt theorems.* [arXiv:2003.06055](https://arxiv.org/abs/2003.06055)
Submitted for publication, with A. Khoroshkin.
- [2] *Hochschild cohomology of Gorenstein monomial algebras.* [arXiv:1909.00487](https://arxiv.org/abs/1909.00487)
Submitted for publication, with V. Dotsenko and V. Gélinas.
- [1] *The cohomology of twisted coalgebras.* [arXiv:2006.03780](https://arxiv.org/abs/2006.03780)
Submitted for publication.

Education

1. Ph.D. in Mathematics – School of Mathematics, Trinity College Dublin 2017–2021
Advisor: [Vladimir Dotsenko](#).
2. Lic. en Cs. Matemáticas – FCEN, Universidad de Buenos Aires 2013–2017
Advisor: [Mariano Suárez-Álvarez](#).

Academic service

1. Refereed for the Journal of Pure and Applied Algebra ([JPAA](#)).

Languages

Latin American Spanish (mothertongue), English (C2 CEFR), Russian (basic user)

Academic Visits

1. Berglund, Alexander *University of Stockholm*, Sweden, September 2019
2. Chuang, Joseph *City University of London*, England, November 2018
3. Dotsenko, Vladimir *IRMA*, Strasbourg, France, November 2019
4. Keller, Bernhard *Université Paris Diderot*, Paris 7, France, March 2019
5. Khoroshkin, Anton *Higher Institute of Economics*, Moscow, Russia, November 2019
6. Sköldberg, Emil *National University of Ireland, Galway*, Ireland, October 2018
7. Solotar, Andrea *Universidad Nacional de Buenos Aires*, Argentina, July 2019
8. Vallette, Bruno *Université Nice Sophia Antipolis*, France, April 2018

Talks and exposition

- July 2020* *Introduction to Algebraic Operads I and II*. Zoom talks at the [Homological Algebra Seminar](#), UBA, Argentina.
- May 2020* [10] Contributed talk at the workshop *DG Methods in Commutative Algebra and Representation Theory*, Zoom Special Session. Organised by Ben Briggs, Janina Letz, and Josh Pollitz.
- March 2020* [8] Contributed talk at the workshop *Higher homotopy algebras in topology II*, Hamilton Mathematics Institute, Trinity College Dublin, Ireland.
- February 2020* [3,9] Invited talk at the workshop *Interactions between algebra and geometry*, IRMA, Université de Strasbourg, France.
- November 2019* [10] Invited talk at the *Colloquium of the Higher School of Economics*, Moscow, Russia.
- [8] Invited talk at the *Colloquium of the Steklov Mathematical Institute*, Moscow, Russia.
- [10] Invited talk at the *Institut de Recherche Mathématique Avancée*, Université de Strasbourg, France.
- September 2019* [10] Invited talk at the *Algebra and Geometry Seminar*, University of Stockholm, Sweden.
- July 2019* *Exact couples and a spectral sequence of derivations*. Talk at the [Homological Algebra Seminar](#), UBA, Argentina.
- May 2019* [8] Contributed talk at *Homotopy meets homology*, Trinity College Dublin, Dublin, Ireland.
- March 2019* [8] Invited talk at *Catégories supérieures, polygraphes et homotopie*, L'Institut de Recherche en Informatique, Paris, France.
- [9] Invited talk at the *Séminaire d'algèbre à l'IHP*, Paris, France.
- November 2018* [8] Invited talk at the *Seminar of Mathematics*, City University of London, England.
- October 2018* [8] Invited talk at the *Seminar of Mathematics*, National University of Ireland, Galway, Ireland.
- August 2017* [1] Contributed talk at the *Coloquio Latinoamericano de Álgebra*, PUCE, Quito, Ecuador.