

Nicolas Libedinsky

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Employment/Education

- 2018-present Associate professor, University of Chile.
- 2012-2018 Assistant professor, University of Chile.
- 2010-2012 Von Humboldt postdoctoral fellow, Freiburg University.
- 2009-2010 Postdoctoral fellow, University Paris 7.
- 2008-2009 Postdoctoral fellow, University Paris 12.
- 2008 Ph.D. in Mathematics, University Paris 7. Advisor: Raphael Rouquier.
- 2003-2006 Magistère in Mathematics, École Normale Supérieure, Paris.
- 2000-2002 B.A. in Mathematics, University of Chile.

As visitor

- 2018 February-March visit to Oregon University (B. Elias).
- 2017 June-August Visit to Sydney Uni (G. Williamson).
- 2011-2016 Eight visits to Max Planck Institut, Bonn (G. Williamson).
- 2015 Simons visiting professor, Oberwolfach Workshop and Max Planck Institut, Bonn.
- 2006-2009 Nine visits to Oxford University (R. Rouquier and G. Williamson).
- 2005-2006 Three visits to Leeds University, England (R. Rouquier).

Fields of Interest

(Higher) Representation theory, combinatorics.

Papers and preprints

- Blob algebra approach to modular representation theory* (joint with D. Plaza), posted in arXiv.
- A non-perverse Soergel bimodule in type A* (joint with G. Williamson), *Comptes Rendus Mathématique* **355** (2017) 853-858.
- The Anti-Spherical category* (joint with G. Williamson), posted in arXiv.
- Gentle Introduction to Soergel bimodules I*, posted in arXiv.

Indecomposable Soergel bimodules for Universal Coxeter groups (joint with B. Elias, with an appendix by Ben Webster), *Trans. Amer. Math. Soc.* **369** (2017) 3883-3910.

Light leaves and Lusztig's conjecture *Adv. Math.* **280** (2015) 772-807.

Standard objects in 2-braid groups (joint with G. Williamson) *Proc. Lond. Math. Soc.* **109** (2014) 1264-1280.

New bases of some Hecke algebras via Soergel bimodules *Adv. Math.* **228** (2011) 1043-1067.

Presentation of right angled Soergel categories by generators and relations *J. Pure Appl. Algebra* **214** (2010) 2265-2278.

Équivalences entre conjectures de Soergel *J. Algebra* **320** (2008) 2695-2705.

Sur la catégorie des bimodules de Soergel *J. Algebra* **320** (2008) 2675-2694.

On the category of Soergel bimodules PhD thesis (2008) available from my homepage.

Selected talks as invited speaker

November 2008 (Besancon, France): Annual algebra seminar of Besanon-Dijon.

February 2009 (Paris, France): Colloque tournant, Groups geometry and representations.

July 2010 (Oporto, Portugal): XIX Oporto Meeting on Geometry, Topology and Physics.

August 2012 (Cordoba, Argentina): Latinoamerican congress of mathematicians.

December 2012 (Buenos Aires, Argentina): Mini-course in XXII Rioplatense congress of Algebra and Geometry.

December 2012 (Pucon, Chile): XIX Latinoamerican colloquium of algebra.

September 2013 (Itacoatiara, Brazil): Jornadas de Algebra em Amasonas.

November 2013 (Melbourne, Australia): Representation Theory in Geometry, Topology and Combinatorics.

January 2014 (Punta Arenas, Chile): Representation theory days in Patagonia.

July 2014 (Lyon, France): Algebraic groups and representations.

December 2014 (Lima, Peru): Mini-course in XX Latinoamerican colloquium of algebra.

January 2015 (Pisa, Italy): Perspectives in Lie theory.

July 2016 (Buenos Aires, Argentina): Latinoamerican algebra colloquium.

December 2016 (Valparaiso, Chile): Sub-plenary talk in the joint meeting between the Chilean Mathematical Society and the Argentinian Mathematical Union.

Scientific committee

Mathematical Congress of the Americas July 2017, Montreal. Session "Symmetry in Algebra, Topology, and Physics".

Humboldt Kolleg Colloquium on Algebras and Representations - Quantum 2016 March 2016, Cordoba, Argentina.

Organization of international conferences

Coorganizer of the conference "SUMA", Valparaíso, December 2016. Joint meeting between the Chilean Mathematical Society and the Argentinian Mathematical Union. Over 300 mathematicians attended.

Organizer of the conference " $q^{\frac{1}{2}}$ ", University of Chile, December 2016. Two days satellite conference of SUMA.

Organizer of the conference celebrating the 50th Anniversary of the Faculty of Sciences, University of Chile, December 2015, featuring ten Nobel Prize and Fields Medal winners as speakers.

Coorganizer of the conference "First international congress in experimental approximations to social interaction", January 2015, Valparaíso, Chile. Multidisciplinary conference.

Coorganizer of the conference "Orderable groups", September 2014, Cajón del Maipo, Chile. Over fifty mathematicians attended.

Professional activities

Referee for the following journals: Proc. Lond. Math. Soc., J. Algebra, Represent. Theory, Trans. Amer. Math. Soc., Transform. Groups.

Member of the governing board of the Chilean Mathematical Society November 2015-November 2017.

Trainer of the Chilean team for the International Mathematical Olympiads, 2000-2002.