

Gaston Burrull

Curriculum Vitae

The University of Sydney
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Personal details

Native City Santiago, Chile.

Nationality Chilean.

Education

2018 – present **Ph.D. in Mathematics**, The University of Sydney, supervised by Geordie Williamson.

2015 – 2018 **M.S. in Mathematics**, Pontificia Universidad Catolica de Chile, supervised by Nicolas Libedinsky.

2012 – 2014 **B.S. in Mathematics**, Pontificia Universidad Catolica de Chile.

Publications and preprints

Publications

1 ***p*-Jones-Wenzl idempotents.**

Joint with Nicolas Libedinsky and Paolo Sentinelli, *Advances in Mathematics* 352 (2019), 246–264.

<https://arxiv.org/abs/1902.00305>.

Preprints

1 **Combinatorial invariance conjecture for \tilde{A}_2 .**

Joint with Nicolas Libedinsky and David Plaza.

<https://arxiv.org/abs/2105.04609>.

Selected talks

Dec. 2018 **The periodic module of the Hecke algebra**, Geometric and categorical representation theory. MATRIX. Creswick, Australia.

Mar. 2017 ***p*-canonical basis for universal Coxeter groups**, Colloquium on Algebras and Representations. Quantum 17. Talca, Chile.

Workshops and Schools

Dec. 2020 **The 64th annual ONLINE meeting of the Australian Mathematical Society**, University of New England, Armidale NSW.

Feb. 2020 **New Connections in Representation Theory**, Mantra Hotel Conference Centre. Mooloolaba, Queensland, Australia.

Dec. 2019 **Workshop on Birational Geometry and Moduli Spaces**, The University of Sydney. Sydney, Australia.

- Aug. 2019 **Graduate Summer School on the Geometry and Modular Representation Theory of Algebraic Groups**, Simons Center for Geometry and Physics. New York, USA.
- Aug. 2019 **Flags, Galleries and Reflection Groups**, The University of Sydney. Sydney, Australia.
- Dec. 2018 **Geometric and categorical representation theory**, MATRIX. Creswick, Australia.
- Mar. 2017 **Colloquium on Algebras and Representations**, Quantum 17. Talca, Chile.
- Feb./Mar. 2016 **Colloquium on Algebras and Representations**, Quantum 16. Cordoba, Argentina.
- Jan. 2014 **Escuela de verano - Cohomologia Galoisiana**, IMAFI, Universidad de Talca. Talca, Chile.

Tutoring experience

- 2019 **Casual Tutor at University of Sydney**, MATH1002 and MATH1014 linear algebra, MATH2088 Number theory and cryptography (Teaching magma).
- 2010 – 2015 **Tutor assistant at Pontifical Catholic University of Chile**, Eleven math courses including: linear algebra, abstract algebra, field and Galois theory, real analysis, measure theory and differential geometry.

Scholarships and awards

- 2017 **CONICYT BECA CHILE**, Financing for Ph.D. program.
- 2015 **CONICYT National Master Scholarship**, Financing for M.S. program.
- 2013 **Rolando Chuaqui Scholarship**, Financing for B.S. program.
- 2010/11 **Honor scholarship 2009/10**, Financing for B.S. program.

Computer skills

Software SageMath, Python, Magma, Inkscape.

Languages

Spanish Native
English Advanced (C1)