Sergio Da Silva

Curriculum Vitae

EDUCATION

2018 (expected)	PhD in Mathematics, Cornell University
2012	MSc in Pure Mathematics, University of Toronto
2011	BSc Honours (high distinction) with a double specialist in pure and applied mathematics, University of Toronto

RESEARCH INTERESTS

Algebraic geometry, algebraic combinatorics, birational geometry, resolution of singularities

PUBLICATIONS

Sergio Da Silva, *Strict Bott-Samelson Resolutions of Schubert Varieties*, preprint, 2017, arXiv: 1702.03468 (accepted to Experimental Mathematics pending revisions).

D. Barbasch, S. Da Silva, B. Elek & G. Krishnan*, Finite Type Multiple Flag Varieties of Exceptional Groups*, preprint, 2017, arXiv: 1708.06341 (submitted to Proceedings of the AMS).

Edward Bierstone, Sergio Da Silva, Pierre Milman and Franklin Vera Pacheco, *Desingularization by Blowings-up Avoiding Simple Normal Crossings*, Proceedings of the AMS, Vol. 142, 2014, 4099-4111.

Sergio Da Silva and Kalle Karu, *On Oda's Strong Factorization Conjecture*, Tohoku Mathematical Journal, Vol. 63 Number 2, 2011, 163-182.

Sergio Da Silva, *Frobenius Splittings and the Desingularization of Hypersurfaces in Positive Characteristic*, in preparation for publication.

Sergio Da Silva, *On the Gorensteinization of Schubert varieties via Boundary Divisors*, in preparation for publication.

EMPLOYMENT

Cornell University	Graduate Algebra (MATH 6310), Teaching Assistant, 2017
	Intro to Computing using python (CS 1110), Teaching Assistant, 2017
	Calculus I (MATH 1110), Instructor, 2017
	Graduate Algebra (MATH 6310), Teaching Assistant, 2016
	Optimization with Metaheuristics (SYSEN 5240), Teaching Assistant, 2016.
	Linear Algebra for Engineers (MATH 2940), Teaching Assistant, 2016
	Ithaca High School Senior Seminar, Lecturer/Project Supervisor, 2015
	Math and Politics (MATH 1340), Teaching Assistant, 2015
	Computation & Culture in the Digital Age (CS/INFO 1305), Teaching Assistant, 2015
	Ithaca High School Senior Seminar, Lecturer/Project Supervisor, 2014
	Summer Tutoring Manager, 2013-2017
	Applied Functional Analysis (MATH 6220), Teaching Assistant, 2014
	Ithaca High School Senior Seminar, Lecturer/Project Supervisor, 2013
	Measure Theory (MATH 6210), Teaching Assistant, 2013
University of Toronto	Calculus! (MAT 137), Teaching Assistant, 2011-2012
	Calculus for Life Sciences (MAT 134), Teaching Assistant, 2011-2012
	Calculus Sci. I (MAT 135), Teaching Assistant, 2009-2011
	Analysis I (MAT 157), Tutor, 2010-2011
	Research funded by NSERC USRA Grant, 2010, Supervised by Edward Bierstone
University of British Columbia	Research funded by NSERC USRA Grant, 2009, Supervised by Kalle Karu

ACADEMIC AWARDS

NSERC Postgraduate Scholarship PGS-D, 2013-2015

Cornell University Graduate Fellowship, 2012-2013

NSERC Postgraduate Scholarship PGS-M, 2011-2012

CONFERENCES AND WORKSHOPS

Clay Mathematics Summer School on Resolution of Singularities, Obergurgl 2012

ALGECOM-09, University of Chicago 2013

Route 81 Conference, Cornell University 2014

AMS Sectional Meeting Program, Rutgers University 2015

Route 81 Conference, Cornell University 2017