

Damiano Testa

Mathematics Institute
University of Warwick

Website: adomani.github.io

Email: d.testa@...

GitHub: [adomani](https://github.com/adomani)

PERSONAL

Biographical

Born September 18, 1978 in Rome – Italian citizen

Interests

Algebraic geometry, number theory, formalization of mathematics

EDUCATION

PhD. in Mathematics, Advisor: Prof. Aise Johan de Jong 2005
Massachusetts Institute of Technology

Laurea di Dottore in Matematica con lode, Advisor: Prof. Corrado de Concini 2001
Università di Roma “La Sapienza”

POSITIONS

Reader 2024-present
University of Warwick

Associate Professor 2013-2024
University of Warwick

Assistant Professor 2011-2013
University of Warwick

Postdoctoral research assistant 2008-11
University of Oxford

Postdoctoral Fellow 2007-08
International University Bremen

Assegno di Ricerca 2006-07
Università di Roma “La Sapienza”

Visiting Assistant Professor 2005-06
Cornell University

PhD student 2001-05
Massachusetts Institute of Technology

AWARDS

<i>Bridging proof and computation</i> (\$568,534) AI For Math Fund award	July 2025-27
<i>External contractor</i> Harmonic	March 2025-present
<i>Pesquisador visitante</i> at UFF, Rio de Janeiro CNPq Fellowship	March-June 2015
<i>Moduli Spaces and Rational Points</i> EPSRC First grant scheme	2013-15
Non-stipendiary Junior Research Fellow New College, Oxford	2008-11
Charles and Holly Housman Award for Excellence in Teaching Massachusetts Institute of Technology	2005
Mentor for Research Summer Institute Massachusetts Institute of Technology	Summer 2005
MIT Presidential Fellowship Massachusetts Institute of Technology	Summer 2001-02

PUBLICATIONS

- [1] A. Baanen, M. R. Ballard, J. Commelin, B. G.-g. Chen, M. Rothgang, and D. Testa, “Growing mathlib: Maintenance of a large scale mathematical library”, in *Intelligent Computer Mathematics*, V. de Paiva and P. Koepke, Eds., 2026, pp. 51–70. eprint: [arXiv:2508.21593](https://arxiv.org/abs/2508.21593).
- [2] M. Pacini and D. Testa, “Contact in algebraic and tropical geometry”, *ZAG Handbook of Modern Algebraic Geometry*, 2025.
- [3] D. Blackwell and D. Testa, “Factors of HOMFLY polynomials”, *Ann. Univ. Ferrara Sez. VII Sci. Mat.*, vol. 70, no. 3, pp. 1155–1163, 2024, ISSN: 0430-3202,1827-1510.
- [4] M. Pacini and D. Testa, “Complex and tropical counts via positive characteristic”, *Expo. Math.*, vol. 40, no. 4, pp. 1096–1115, 2022, ISSN: 0723-0869,1878-0792.
- [5] M. Pacini and D. Testa, “On a question of Dolgachev”, *Math. Res. Lett.*, vol. 27, no. 1, pp. 281–299, 2020.
- [6] M. Pacini and D. Testa, “Reconstructing general plane quartics from their inflection lines”, *Trans. Amer. Math. Soc.*, vol. 372, no. 1, pp. 705–732, 2019.
- [7] C. Ciliberto, A. L. Knutsen, J. Lesieutre, V. Lozovanu, R. Miranda, Y. Mustopa, and D. Testa, “A few questions about curves on surfaces”, *Rend. Circ. Mat. Palermo (2)*, vol. 66, no. 2, pp. 195–204, 2017.
- [8] F. Bogomolov, I. Cheltsov, F. Mangolte, C. Shramov, and D. Testa, “Spitsbergen volume”, *Eur. J. Math.*, vol. 2, no. 1, pp. 1–8, 2016.
- [9] E. V. Flynn and D. Testa, “Finite Weil restriction of curves”, *Monatsh. Math.*, vol. 176, no. 2, pp. 197–218, 2015.
- [10] B. Poonen, D. Testa, and R. van Luijk, “Computing Néron-Severi groups and cycle class groups”, *Compos. Math.*, vol. 151, no. 4, pp. 713–734, 2015.

- [11] M. Artebani, A. Laface, and D. Testa, “On Büchi’s K3 surface”, *Math. Z.*, vol. 278, no. 3-4, pp. 1113–1131, 2014.
- [12] N. Bruin, E. V. Flynn, and D. Testa, “Descent via $(3, 3)$ -isogeny on Jacobians of genus 2 curves”, *Acta Arith.*, vol. 165, no. 3, pp. 201–223, 2014.
- [13] W. Castryck, M. Strengh, and D. Testa, “Curves in characteristic 2 with non-trivial 2-torsion”, *Adv. Math. Commun.*, vol. 8, no. 4, pp. 479–495, 2014.
- [14] M. Pacini and D. Testa, “Plane quartics with at least 8 hyperinflection points”, *Bull. Braz. Math. Soc. (N.S.)*, vol. 45, no. 4, pp. 819–836, 2014.
- [15] C. Salgado, D. Testa, and A. Várilly-Alvarado, “On the unirationality of del Pezzo surfaces of degree 2”, *J. Lond. Math. Soc. (2)*, vol. 90, no. 1, pp. 121–139, 2014.
- [16] A. Laface and D. Testa, “Nef and semiample divisors on rational surfaces”, in *Torsors, étale homotopy and applications to rational points*, ser. London Math. Soc. Lecture Note Ser. Vol. 405, Cambridge Univ. Press, Cambridge, 2013, pp. 429–446.
- [17] M. Pacini and D. Testa, “Recovering plane curves of low degree from their inflection lines and inflection points”, *Israel J. Math.*, vol. 195, no. 1, pp. 283–316, 2013.
- [18] E. V. Flynn, D. Testa, and R. van Luijk, “Two-coverings of Jacobians of curves of genus 2”, *Proc. Lond. Math. Soc. (3)*, vol. 104, no. 2, pp. 387–429, 2012.
- [19] M. Marietti and D. Testa, “Conical and spherical graphs”, *European J. Combin.*, vol. 33, no. 7, pp. 1606–1618, 2012.
- [20] D. Testa, A. Várilly-Alvarado, and M. Velasco, “Big rational surfaces”, *Math. Ann.*, vol. 351, no. 1, pp. 95–107, 2011.
- [21] R. Heath-Brown and D. Testa, “Counting rational points on cubic curves”, *Sci. China Math.*, vol. 53, no. 9, pp. 2259–2268, 2010.
- [22] D. Testa, “The irreducibility of the spaces of rational curves on del Pezzo surfaces”, *J. Algebraic Geom.*, vol. 18, no. 1, pp. 37–61, 2009.
- [23] D. Testa, A. Várilly-Alvarado, and M. Velasco, “Cox rings of degree one del Pezzo surfaces”, *Algebra Number Theory*, vol. 3, no. 7, pp. 729–761, 2009.
- [24] M. Marietti and D. Testa, “A uniform approach to complexes arising from forests”, *Electron. J. Combin.*, vol. 15, no. 1, Research Paper 101, 18, 2008.
- [25] M. Marietti and D. Testa, “Cores of simplicial complexes”, *Discrete Comput. Geom.*, vol. 40, no. 3, pp. 444–468, 2008.
- [26] D. Testa, “Fano varieties in index one Fano complete intersections”, *Math. Z.*, vol. 259, no. 1, pp. 61–64, 2008.
- [27] M. Stillman, D. Testa, and M. Velasco, “Gröbner bases, monomial group actions, and the Cox rings of del Pezzo surfaces”, *J. Algebra*, vol. 316, no. 2, pp. 777–801, 2007.
- [28] D. Testa, *The Severi problem for rational curves on del Pezzo surfaces*. ProQuest LLC, Ann Arbor, MI, 2005, Thesis (Ph.D.)—Massachusetts Institute of Technology.
- [29] D. Testa, “Varietà quiver e teoria delle rappresentazioni”, *Master’s thesis (italian)*, 2001.

PREPRINTS

- [30] D. Testa, 3×3 singular matrices of linear forms, 2017. eprint: [arXiv:1701.06864](https://arxiv.org/abs/1701.06864).
- [31] D. Testa, “Singular hyperplane sections of Fermat hypersurfaces”, *preprint*, 2016.

- [32] A. Laface and D. Testa, *On minimal rational elliptic surfaces*, 2015. eprint: [arXiv:1502.00275](#).
- [33] A. Brooke-Taylor and D. Testa, *The infinite random simplicial complex*, 2013. eprint: [arXiv:1308.5517](#).
- [34] M. Stoll and D. Testa, *The surface parametrizing cuboids*, 2010. eprint: [arXiv:1009.0388](#).

BOOKS

- [35] M. Bright, D. Testa, and R. van Luijk, *Geometry and Arithmetic of Surfaces*. 2025+, in preparation.
- [36] A. J. de Jong, R. Beheshti, A. Ghitza, M. Lieblich, and D. Testa, *Elliptic Surfaces*. 2025+, in preparation.

- **Warwick**

- 2026-27, Term 1 – MA4N1 Theorem Proving with Lean
- 2025-26, Term 1 – MA4N1 Theorem Proving with Lean
- 2024-25, Term 1 – MA3H5 Manifolds
- 2024-25, Term 1 – MA4N1 Theorem Proving with Lean
- 2023-24, Term 1 – MA3H5 Manifolds
- 2023-24, Term 1 – MA4N1 Theorem Proving with Lean
- 2022-23, Term 1 – MA3H5 Manifolds
- 2022-23, Term 1 – MA3J9 Historical Challenges in Mathematics
- 2021-22, Term 2 – MA939 Applied Scheme Theory
- 2021-22, Term 2 – MA3J9 Historical Challenges in Mathematics
- 2020-21, Term 2 – MA939 Topics in Number Theory (Brauer-Manin obstruction)
- 2020-21, Term 2 – MA3J9 Historical Challenges in Mathematics
- 2019-20, Term 2 – MA3J9 Historical Challenges in Mathematics
- 2019-20, Term 2 – MA426 Elliptic Curves
- 2018-19, Term 2 – MA106 Linear Algebra
- 2018-19, Term 2 – MA426 Elliptic Curves
- 2017-18, Term 2 – MA106 Linear Algebra
- 2017-18, Term 2 – MA426 Elliptic Curves
- 2016-17, Term 2 – MA106 Linear Algebra
- 2015-16, Term 2 – MA138 Sets and Numbers
- 2014-15, Term 1 – MA1250 Introduction to Geometry
- 2013-14, Term 1 – MA251 Algebra I
- 2013-14, Term 1 – MA1250 Introduction to Geometry
- 2012-13, Term 1 – MA132 Foundations
- 2012-13, Term 3 – MA246 Number Theory
- 2012-13, Term 1 – MA132 Foundations
- 2011-12, Term 3 – MA246 Number Theory
- 2011-12, Term 2 – MA106 Linear Algebra

- **Oxford**

- 2011, Hillary Term – Part A Group Theory, New College Tutor
- 2011, Hillary Term – Part C Elliptic Curves, Tutor
- 2010, Michaelmas Term – Part C Algebraic Geometry, Tutor
- 2010, Trinity Term – Part A Number Theory
- 2010, Hillary Term – Part A Group Theory, New College Tutor

- **La Sapienza**

- 2006, October-December – Algebra Lineare a Ingegneria Clinica, Tutor

- **Cornell**

- 2006, Spring – 767 Algebraic Geometry: Algebraic Surfaces
- 2006, Spring – 191 Calculus for Engineers
- 2005, Fall – 192 Calculus for Engineers

- **MIT**

- 2005, Spring - 18.06 Linear Algebra, Course Administrator
- 2004, Summer - 18.03 Differential Equations
- 2004, Spring - 18.04 Complex Variables with Applications, Rec. Instr.
- 2003, Fall - 18.02 Multivariable Calculus, Rec. Instr.
- 2003, Summer - 18.03 Differential Equations
- 2003, Spring - 18.03 Differential Equations, Rec. Instr.
- 2002, Fall - 18.701 Algebra, Grader

- **Minicourses**

- 2026, March 16-20, *The classification of finite simple groups*, workshop and general overview, Tsinghua University, Beijing, China.
- 2023, December 11-15, *Minicorso Lean*, last week of *Laboratorio di formalizzazione di dimostrazioni matematiche tramite il software Lean*, Università Pisa, Italy.
- 2023, May 2-6, *Atelier Lean*, minicourse during *The seventh mini symposium of the Roman Number Theory Association*, with Riccardo Brasca and Filippo Nuccio, Università Roma Tre, Italy.
- 2021, August 16-20, *Superficies Racionales sobre un Cuerpo* online minicourse at *AGRA IV, two-week school in Arithmetic, Groups and Analysis*.
- 2021, July (on hold), Universidad del Cauca in Popayán, Colombia: *CIMPA School “Isogenies of elliptic curves and their applications to cryptography”*.
- 2019, July 22-26, Düsseldorf, Germany: *Arithmetic properties of del Pezzo surfaces*.
- 2014, February 17-21, Rational points on varieties, Liberdade Em Geometria Algébrica LEGAL 2014, Teresópolis, Brazil.
- 2014, January 30-February 6, Cox Rings of Rational Surfaces, minicourse at IMPA, Rio de Janeiro, Brazil.
- 2014, January 14-21, Cox Rings of Rational Surfaces, minicourse at Universidad de Concepción, Chile.
- 2013, January 5-15, *Rational points on surfaces*, minicourse at Universidad de Concepción, Chile.
- 2008, April 14-18, Warwick, UK: *Instructional workshop on Surfaces: Geometry and Arithmetic*, with Martin Bright and Ronald van Luijk.

- **Organized conferences**

- *Frontiers of rationality*, with Ivan Cheltsov, Frédéric Mangolte, Constantin Shramov, Longyearbyen, Spitsbergen 14-18 July 2014.
- *Edge days*, with Ivan Cheltsov, Edinburgh 6-8 June 2014.
- *Rational Points-Geometric, Analytic and Explicit Approaches*, with Roger Heath-Brown, John Cremona, Samir Siksek, Michael Stoll, Warwick, 27-31 May, 2013.

- **Service**

- **Mathlib** maintainer, 2024-present
- Exam Secretary, 2019-present
- Warwick University Open Days presentations, 2011-present
- Chair of the Athena Swan Committee, 2015
- Warwick in Africa, Masterclasses, Agona and Accra, Ghana, July 2015
- Member of the Athena Swan Committee, 2014
- Warwick in Africa, Masterclasses, Thohoyandou, South Africa, August 2014
- New College admissions for the year 2010-11
- Team leader for Jacobs University at the 16th IMC, Budapest, Hungary 2009
- Team leader for Jacobs University at the 15th IMC, Blagoevgrad, Bulgaria 2008
- Organizer of the GAeL XVI conference in Aranjuez, Spain, 2008
- Organizer of the GAeL XV conference in Istanbul, Turkey, 2007

- Referee for IMRN, Advances in Mathematics, Discrete Mathematics, Enseignement Mathématique, Journal of Algebra, LMS Journal of Computation and Mathematics, ANT, Mathematische Zeitschrift
- Reviewer for Mathematical Reviews
- Organizer of Commutative Algebra and Algebraic Geometry Seminar, Cornell 2005-06
- Organizer of BAGS: student seminar in algebraic geometry in 2002-03 and 2004- 05
- Mentor for two students at RSI: Summer 2002

PhD Students

- **Current**

- 2023-present, Arnaud Vilpert, Warwick.
- 2023-present, Tommaso Faustini, Warwick.

- **Past**

- 2021-25, Álvaro González Hernández, co-supervised with Gavin Brown, Warwick.
- 2023-25, Ben Moore, co-supervised with Minhyong Kim, Warwick.
- 2020-24, Elvira Lupoian, co-supervised with Samir Siksek, Warwick.
- 2019-23, Philippe Michaud-Rodgers, co-supervised with Samir Siksek, Warwick.
- 2019-23, Steven Groen, Warwick.
- 2018-20, Jorge Mendoza, Warwick.
- 2014-20, Francesco Broggi, Warwick.
- 2012-16, Ian Vincent, Warwick.
- 2012-16, Florian Bouyer, Warwick.
- 2008-12, Frank Gounelas, co-supervised with Victor Flynn, Oxford.

Research project supervised

- 2025-26, Jia Chen, *Formalization and Graph theory*, MSc project.
- 2025-26, Agnes Mullen, *The cuboid problem*, 3rd year project.
- 2024-25, Pier Giorgio Peroni, *Quartic surfaces*, MSc project.
- 2024-25, Ivan Yahorynkau, *Immersion of manifolds in \mathbb{R}^n* , 3rd year project.
- 2023-24, Gareth Ma, *Formalizations in Lean*, 3rd year project.
- 2023-24, Hugo Pottinger, *Explorations in algebraic geometry using Julia*, 4th year project.
- 2022-23, Lucie Gatzmaga, *The Modular Approach to the Generalised Fermat Equation*, 3rd year project.
- 2021-22, AJ Fong, *Points at rational distances from the vertices of a rectangle*, 4th year project.
- 2021-22, Sam Gue, *Rational derived polynomials*, 4th year project.
- 2021, Paul Lezeau, *Proving Dedekind's Theorem in Lean*, URSS project.
- 2020-21, Elizabeth Haycox, *Elliptic Curves and Hilbert's Tenth Problem*, 4th year project.
- 2020-21, Ricardo Antunes Ferreira, *The Hasse-Minkowski Theorem*, 3rd year project.
- 2018-19, Philippe Michaud-Rodgers, *Magic Squares of Squares*, 4th year project.
- 2018-19, Rebecca Myers, *Inflection Points of Quartic Plane Curves over Field of Characteristic 3*, 4th year project.
- 2017-18, Douglas Blackwell, *Algebraic Properties of Knot Polynomials*, 4th year project.
- 2015, Thomas Colclough, *Hilbert's 3rd problem in 3 dimensions*, URSS project.
- 2013, Robin Bartlett, *Curves and Galois Groups*, URSS project.
- 2012, Rory Potter, *Big Rational Surfaces*, URSS project.

TALKS AND CONFERENCES

- 2025, December 9-12, *Metaprogramming in Lean*, Bridging Formal Mathematics and AI, ItaLean 2025, Bologna, Italy.
- 2025, November 19, *Bridging proof and computation*, Maths Week Parliamentary Expo, House of Commons, London.
- 2025, November 4, *The Tactic Analysis Framework*, study group on Lean, Imperial.
- 2025, June 17, *Specialisation and generalisation*, Algebraic Geometry learning seminar, Warwick.
- 2025, January 14, *An introduction to linters*, [Lean Together 2025](#), online workshop, [slides](#).
- 2024, June 24-28, *Formalising algebraic geometry*, AIM online workshop.
- 2023, December 13, *Mathematics, automation, theorem proving*, Colloquium, Pisa, Italy, [slides](#).
- 2023, November 14, *Mathematics, automation, theorem proving*, Warwick Maths Society, [slides](#).
- 2023, September 7, *Algebraic Geometry in Lean*, [Lean for the Curious Mathematician 2023](#), Düsseldorf, [slides](#).
- 2021, November 29, *Lines of polynomials with Galois group \mathfrak{A}_{2n}* , Greek Algebra & Number Theory seminar, online.
- 2021, November 22, *$\overline{M}_{0,134}$ is not a Mori Dream Space*, Warwick $\overline{M}_{0,n}$ seminar, online.
- 2021, January 7, *Mathematical insights from using Lean*, Lean Together 2021, online.
- 2020, December 8, *Computers and Mathematics*, Warwick Maths Society, online.
- 2020, October 7, *Contact in algebraic and tropical geometry*, BRAG, Rio de Janeiro, Brasil.
- 2020, March 31, *Contact in algebraic and tropical geometry*, dematerialized session of “Algèbre et Géométrie”, Versailles, France.
- 2019, July 22-26, *Arithmetic properties of del Pezzo surfaces*, Düsseldorf, Germany
- 2018, November 30, *A self-map on the space of plane quartics*, Rennes, France.
- 2018, May 16, *Plane Quartics and their Inflection Lines*, COW Seminar, Cardiff University, UK.
- 2018, May 15, *Plane quartics and their inflection lines*, Algebraic Geometry Seminar, Sheffield University, UK.
- 2017, November 15-17, *Plane quartics and their inflection lines*, Conference Rational points and Zariski density, Copenhagen, Denmark.
- 2017, July 14, *Singular plane sections of Fermat surfaces and roots of unity*, GLEN Seminar, Manchester, UK.
- 2016, November 10, *Lines in algebraic geometry*, Colloquium, IMPA, Rio de Janeiro, Brasil.
- 2015, October 21, *Geometric influences on arithmetic problems*, Colloquium, Sheffield University, UK.
- 2015, June 1-12, *K3 surfaces arising from arithmetic problems*, II ELGA, Cabo Frío, Rio de Janeiro, Brasil.

- 2015, May 5-7, *Two lectures on rational points*, IMPA, Rio de Janeiro, Brasil.
- 2015, March 27-June 13, *Special Thematic Program on Algebraic Geometry*, IMPA, Rio de Janeiro, Brasil.
- 2015, February 9-13, *Conference “Recent advances in Linear series and Newton-Okounkov bodies”*, Università degli studi di Padova, Padova, Italy.
- 2015, February 5-6, *K3 surfaces arising from arithmetic problems*, Conference “Geometria in Bicocca 2015”, Università di Milano-Bicocca, Milano, Italy.
- 2014, December 10, *K3 surfaces arising from arithmetic problems*, Algebraic geometry seminar, Humboldt University, Berlin, Germany.
- 2014, November 10-14, *K3 surfaces arising from arithmetic problems*, Conference “K3, Enriques Surfaces and Related Topics”, Nagoya University, Nagoya, Japan.
- 2014, November 6, *K3 surfaces arising from arithmetic problems*, COW Seminar, Andrew Wiles Building, Oxford, UK.
- 2014, October 15, *The Büchi K3 surface and its rational points*, Number theory and geometry seminar, University of Nottingham, Nottingham, UK.
- 2014, September 8-9, *The Büchi K3 surface and its rational points*, Workshop Fibrations on algebraic varieties and related topics, Università di Milano, Milano, Italy.
- 2014, June 6-8, *Certain rational elliptic fibrations and their exceptional curves*, Edge Days, Edinburgh University, UK.
- 2014, May 12-16, *Special hyperplane sections of Fermat hypersurfaces and sums of roots of unity*, Workshop Rational and integral points on higher-dimensional varieties, AIM, Palo Alto, USA.
- 2014, April 30, *The Büchi K3 surface and its rational points*, UGA, Athens, USA.
- 2014, April 4-6, *The Büchi K3 surface and its rational points*, Texas Algebraic Geometry Symposium, Rice University, USA.
- 2014, February 17-21, *Rational points on varieties*, Liberdade Em Geometria Algébrica LEGAL 2014, Teresópolis, Brazil.
- 2014, February 14, *Moduli spaces and rational points*, Colloquium, Universidad de los Andes, Bogotá, Colombia.
- 2014, January 30-February 6, *Cox Rings of Rational Surfaces*, minicourse at IMPA, Rio de Janeiro, Brazil.
- 2014, January 28, *Singular plane sections of Fermat surfaces and roots of unity*, UFF Singularity Workshop, UFF, Niterói, Brazil.
- 2014, January 14-21, *Cox Rings of Rational Surfaces*, minicourse at Universidad de Concepción, Chile.
- 2014, January 6-10, *Cox rings of rational surfaces*, Workshop CARP: Collaborations Around Rational Points, Bellairs Research Institute, Holetown, Barbados.
- 2013, December 18, *Curve di genere due con un’involuzione non iperellittica*, Università di Ferrara, Italy.

- 2013, December 11-13, *Unirationality of certain del Pezzo surfaces of degree two*, Algebraic and Arithmetic Geometry - “Birpol6”, Basel, Switzerland.
- 2013, November 14, *Blow ups of \mathbb{P}^3 along lines*, Linfoot Seminar, University of Bristol, UK.
- 2013, September 23-27, *Cox rings of rational surfaces*, Workshop on Okounkov bodies and Nagata-type Conjectures, IMPANGA, Warsaw, Poland.
- 2013, June 20, *The Büchi K3 surface and its rational points*, during the Program on Rational Points, Rational Curves and Entire Holomorphic Curves on Projective Varieties, CRM, Montréal, Québec.
- 2013, June 6-9, *Reconstructing plane quartics with many undulations from their inflection lines*, Edge Days 2013, Edinburgh, UK.
- 2013, June 3-4, *Computability of Néron-Severi groups*, London-Paris Number Theory Seminar, Imperial College, London.
- 2013, March 20, *The Büchi K3 surface and its rational points*, London Number Theory Seminar, UCL, London.
- 2013, March 11-15, *The surface of cuboids and Siegel modular threefolds*, Conference “Nouvelles directions en arithmétique et géométrie des surfaces algébriques”, Luminy, France.
- 2013, January 5-15, *Minicourse on Rational points on surfaces*, Concepción, Chile.
- 2012, October 29, *Dihedral configurations in \mathbb{P}^1* , Algebra Seminar, UFRJ, Rio de Janeiro, Brasil.
- 2012, October 26, *The Büchi K3 surface and its rational points*, Colóquio de Geometria e Aritmética, Rio de Janeiro, Brasil.
- 2012, July 2-7, *The Büchi K3 surface and its rational points*, Durham Symposium on “Interactions of birational geometry with other fields”, Durham, UK.
- 2012, June 11-17, *Unirationality of certain del Pezzo surfaces of degree two*, Workshop on Essential Dimension and Cremona Groups, Chern Institute of Mathematics, Tianjin, China.
- 2012, April 23-27, *Plane cubics and their flex lines*, Conference on Birational and Affine Geometry, Steklov Mathematical Institute, Moscow, Russia.
- 2011, December 2, *Surfaces rationnelles avec diviseur anticanonique pseudo-effectif*, Université de Toulouse, France.
- 2011, October, *Conics on the Fermat quintic threefold*, IMPA, Rio de Janeiro, Brasil.
- 2011, October, *Plane cubics and their flex lines*, Universidade Federal Fluminense, Niterói, Brasil.
- 2011, October, *The surface of cuboids and Siegel modular threefolds*, 11th ALGA, Maresias, Brasil.
- 2011, July 18-29, assistant for the Summer Graduate Workshop on Toric Varieties, Cortona, Italy.
- 2011, July, *The surface of cuboids and Siegel modular threefolds*, Sino-French Summer Institute 2011 in Arithmetic Geometry, Chern Institute of Mathematics, Tianjin, China.
- 2011, May, *The surface of cuboids and Siegel modular threefolds*, Cambridge University, Cambridge, UK.
- 2011, March, *Conics on the Fermat quintic threefold*, Irish Algebraic Geometry Seminar, University College Cork, Cork, Ireland.

- 2011, January 10-14, Workshop on Torsors: theory and applications, ICMS, Edinburgh, UK.
- 2010, December, *Rational surfaces with pseudo-effective anticanonical divisor*, V Iberoamerican Congress on Geometry, Pucón, Chile.
- 2010, October, *Unirationality of certain del Pezzo surfaces of degree two*, Arithmetic of Surfaces, Lorentz Center, Leiden, The Netherlands.
- 2010, September, *Conics on the Fermat quintic threefold*, Mathematics Colloquium, Rice University, USA.
- 2010, September, *The Picard group of the space of perfect cuboids*, Rice University, USA.
- 2010, May, *Relative Weil restriction*, ETH Zürich, Switzerland.
- 2010, April, *Intersection of two cubics and a conjecture of Artin*, BMC 2010, Edinburgh, UK.
- 2010, March, *Cox rings of del Pezzo surfaces*, Warwick University, UK.
- 2009, November, *Grosses surfaces rationnelles*, Séminaire “Variétés rationnelles”, ENS, Paris, France.
- 2009, September, *Intersections of two quadrics in \mathbb{P}^5* , Bristol University, UK.
- 2009, March-June, *Big rational surfaces*, at Bristol, Cambridge, Columbia, Oxford, Warwick.
- 2009, February, *Linear subspaces in the intersection of two quadrics*, Cambridge University, UK.
- 2008, June, *The Rational Box Problem*, at the “Workshop on Rational Points on Curves and Higher Dimensional Varieties”, Warwick University, UK.
- 2008, April 14-18, *Instructional Workshop on Surfaces: Geometry and Arithmetic*, with Martin Bright and Ronald van Luijk, 2007-2008 Warwick EPSRC Symposium on Algebraic Geometry, UK.
- 2008, November 30-December 5, Workshop Arithmetic of K3 Surfaces, BIRS, Banff, Canada.
- 2008, January, *Connectedness of mapping spaces to del Pezzo surfaces*, Giornate Genovesi II, Università di Genova, Italy.
- 2007, December, *Rationally connected varieties and unirational varieties*, Max Planck Institut für Mathematik, Bonn, Germany.
- 2007, October, *Rationally Connected Varieties*, Mathematics Colloquium, Jacobs University Bremen, Germany.
- 2007, September, *Rationally Connected Varieties*, Workshop of young researchers, Universidad Complutense de Madrid, Spain.
- 2007, July, *Arithmetic of del Pezzo Surfaces*, Rational Points Workshop, Jacobs University Bremen, Germany.
- 2007, June, *Rationally connected varieties and unirational varieties*, joint Bremen-Göttingen-Hannover Seminar, Leibniz Universität Hannover, Germany.
- 2007, March, *Cores of simplicial complexes*, 58ème Séminaire Lotharingien, Lyon, France.
- 2007, January, *Varietà unirazionali e varietà razionalmente connesse*, Scuola Normale Superiore, Pisa, Italy.

- 2006, November, *Rationally connected varieties and spaces of rational curves*, Université de Provence Aix-Marseille, France.
- 2006, March, *Cox rings and del Pezzo surfaces*, GAeL conference, Będlewo, Poland.
- 2006, March, *The Brauer group of \mathbb{Q}_p* , Commutative Algebra and Algebraic Geometry Seminar, Cornell, USA.
- 2006, February, *Rational curves on the quintic threefold*, Lie Groups Seminar, Cornell, USA.
- 2006, January 11: *Anelli di Cox e superficie di del Pezzo*, Università di Roma “La Sapienza,” Italy.
- 2005, October 15, *Spaces of rational curves on del Pezzo surfaces*, Route 81 conference, Queen’s University, Canada.
- 2005, September, *Rationally connected varieties - examples, really!* and *Irreducibility of some mapping spaces*, series of talks at Cornell, USA.
- 2005, June 10, *Il problema di Severi per curve razionali su superficie di del Pezzo*, Università di Roma II “Tor Vergata”, Italy.
- 2005, January-March, *The Severi Problem for Rational Curves on del Pezzo Surfaces*, Brown, UPenn, Harvard, Brandeis, Columbia, USA.
- 2004, June 7, *Spazi di Mappe Stabili*, Università di Roma II “Tor Vergata”, Italy.
- 2001-2004: Several talks in graduate student seminars at MIT, including *The h-cobordism theorem*, *The Banach-Tarski Paradox*, *Quotients of varieties by reductive groups*, USA.