SEBASTIAN CASALAINA-MARTIN

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APPOINTMENTS

University of Colorado
Associate Professor, 2015–present.
Assistant Professor, 2008–15.

Harvard University
NSF Postdoctoral Research Fellowship, 2005–2008.

Stony Brook University
Simons Instructor, 2004–2007.

EDUCATION

Columbia University
Ph.D., Mathematics, 2004. Advisor: Robert Friedman.
M.Phil., Mathematics, 2004.
M.A., Mathematics, 2000.

Brown University
B.Sc., Mathematics, *Honors*, 1998.

VISITING
POSITIONS

Leibniz University Hannover
Riemann Fellow, Fall 2017.

Stony Brook University
Visiting Assistant Professor, Summer 2010.

Mathematical Sciences Research Institute
Postdoctoral Fellow, Spring 2009.

GRANTS AND
AWARDS

- PI on **Simons Foundation** Collaboration Grant for Mathematicians #581058, 2018–2023.
- PI on **NSA** Standard Grant H98230-16-1-0053, 2016–2018.

- **Simons Foundation** Collaboration Grant for Mathematicians #317572, 2014–2016.
- PI on **NSF** Standard Grant DMS-11-01333, 2011–14.
- **NSF** Postdoctoral Research Fellowship DMS-05-03228, 2005–2008.
- Co-PI on **NSF** Seminar Grants DMS-19-46952 (2020–23), DMS-16-36713 (2016–2019), DMS-15-02166 (2015), DMS-09-55038 (2010–15), DMS-09-51907 (2009).

RESEARCH

I am an algebraic geometer with a broad range of interests. My research focuses on curves, abelian varieties, cubic threefolds, vector bundles, and moduli spaces.

PUBLICATIONS

All publications are available online at http://math.colorado.edu/~casa

1. J. Acther, S. Casalaina-Martin, and C. Vial, *The Walker Abel–Jacobi map descends*, Math. Z. **300** (2022), no. 2, 1799–1817. [arXiv:2101.07506]

2. S. Casalaina-Martin, *The algebraic Abel–Prym map*; appendix to *Kirchhoff's theorem for Prym varieties*, by Yoav Len and Dmitry Zakharov, preprint. [arXiv:2012.15235]

3. J. Acther, S. Casalaina-Martin, and C. Vial, *Decomposition of the diagonal, intermediate Jacobians, and universal codimension-2 cycles in positive characteristic*, preprint. [arXiv:2007.07470]

4. J. Acther, S. Casalaina-Martin, and C. Vial, *On the image of the second l-adic Bloch map*, to appear in the proceedings of the 2019 Schiermonnikoog conference on Rationality of Algebraic Varieties. [arXiv:2007.07180]

5. S. Casalaina-Martin and Z. Zhang, *The moduli space of cubic surface pairs via the intermediate Jacobians of Eckardt cubic threefolds*, J. Lond. Math. Soc. **104** (2021), no. 1, 1–34. [arXiv:2002.09861]

6. J. Acther, S. Casalaina-Martin, and C. Vial, *A functorial approach to regular homomorphisms*, preprint. [arXiv:1911.09911]

7. S. Casalaina-Martin, S. Grushevsky, K. Hulek, and R. Laza, *Cohomology of the moduli space of cubic threefolds and its smooth models*, to appear in Mem. Amer. Math. Soc. [arXiv:1904.08728]

8. J. Achter, S. Casalaina-Martin and C. Vial, *Normal functions for algebraically trivial cycles are algebraic for arithmetic reasons*, Forum of Mathematics, Sigma **7** (2019), no. 36, 1–22. [arXiv:1810.07404]

9. J. Acther, S. Casalaina-Martin, and C. Vial, *Derived equivalent threefolds, algebraic representatives, and the coniveau filtration*, Math. Proc. Cambridge Philos. Soc. **167** (2019), no. 1, 123–131. [arXiv:1704.01902]

10. J. Acther, S. Casalaina-Martin, and C. Vial, *Distinguished models of intermediate Jacobians*, J. Inst. Math. Jussieu **19** (2020), no. 3, 891–918. [arXiv:1611.07471]

11. J. Achter, S. Casalaina-Martin and C. Vial, *Parameter spaces for algebraic equivalence*, Int. Math. Res. Not. IMRN 2019, no. 6, 1863–1893. [arXiv:1610.06586]

12. S. Casalaina-Martin, S. Grushevsky, K. Hulek and R. Laza, *Complete moduli of cubic threefolds and their intermediate Jacobians*, Proc. Lond. Math. Soc. **122** (2021), no. 3, 259–316. [arXiv:1510.08891]

13. J. Acther, S. Casalaina-Martin, K. Honigs and C. Vial, *Derived equivalent varieties have isogenous Picard varieties*; appendix to *Derived equivalence, Albanese varieties, and the zeta functions of 3-dimensional varieties*, by K. Honigs, Proc. Amer. Math. Soc. **146** (2018), no. 3, 1005–10013. [arXiv:1604.00042]

14. S. Casalaina-Martin, M. Popa and S. Schreieder, *Generic vanishing and minimal cohomology classes on abelian fivefolds*, J. Algebraic Geom. **27** (2018), no. 3, 553–581. [arXiv:1602.06231]

15. S. Casalaina-Martin and J. Wise, *An introduction to moduli stacks, with a view towards Higgs bundles on algebraic curves*. The geometry, topology and physics of moduli spaces of Higgs bundles, 199–399, Lect. Notes Ser. Inst. Math. Sci. Natl. Univ. Singap., 36, World Sci. Publ., Hackensack, NJ, 2018. [arXiv:1708.08124]

16. J. Achter, S. Casalaina-Martin and C. Vial, *On descending cohomology geometrically*, Compositio Math. **153** (2017), no. 7, 1446–1478. [arXiv:1410.5376]

17. S. Casalaina-Martin, J. Kass and F. Viviani, *The singularities and birational geometry of the universal compactified Jacobian*, Algebraic Geometry **4** (2017), no. 3, 353–393. [arXiv:1408.3494]

18. S. Casalaina-Martin, S. Grushevsky, K. Hulek and R. Laza, *Extending the Prym map to toroidal compactifications of the moduli space of abelian varieties*, (with an appendix by Mathieu Dutour Sikiric), J. Eur. Math. Soc. (JEMS) **19** (2017), no. 3, 659–723. [arXiv:1403.1938]

19. S. Casalaina-Martin, J. Kass and F. Viviani, *The local structure of compactified Jacobians*, Proc. Lond. Math. Soc. **110** (2015), no. 2, 510–542. [arXiv:1107.4166]

20. S. Casalaina-Martin, D. Jensen and R. Laza, *Log canonical models and variation of GIT for genus four canonical curves*, J. Algebraic Geom. **23** (2014), no. 4, 727–764. [arXiv:1203.5014]

21. S. Casalaina-Martin, *A tour of stable reduction with applications*, A celebration of algebraic geometry, 65–117, Clay Math. Proc., **18**, Amer. Math. Soc., Providence, RI, 2013. [arXiv:1207.1048]

22. S. Casalaina-Martin, J. Kass and F. Viviani, *The geometry and combinatorics of cographic toric face rings*, Algebra and Number Theory **7** (2013), no. 8, 1781–1815. [arXiv:1102.2547]

23. S. Casalaina-Martin and R. Laza, *Simultaneous semi-stable reduction for curves with ADE singularities*, Trans. Amer. Math. Soc. **365** (2013), no. 5, 2271–2295. [arXiv:1007.0265]

24. S. Casalaina-Martin, D. Jensen and R. Laza, *The geometry of the ball quotient model of the moduli space of genus four curves*, Compact Moduli Spaces and Vector Bundles, 107–136, Contemp. Math., **564**, Amer. Math. Soc., Providence, RI, 2012. [arXiv:1109.5669]

25. S. Casalaina-Martin and J. Kass, *A Riemann singularity theorem for integral curves*, Amer. J. Math. **134** (2012), no. 5, 1143–1165. [arXiv: 0907.0212]

26. S. Casalaina-Martin and M. Teixidor i Bigas, *Singularities of Brill- Noether loci for vector bundles on curves*, Math. Nach. **284** (2011), no. 14-15, 1846–1871. [arXiv:0710.2480]

27. S. Casalaina-Martin and R. Laza, *The moduli space of cubic threefolds via degenerations of the intermediate Jacobian*, J. Reine Angew. Math. (Crelle) **633** (2009), 29–65. [arXiv:0710.5329]

28. S. Casalaina-Martin, T. Gwena, and M. Teixidor i Bigas, *Some examples of vector bundles in the base locus of the generalized theta divisor*, C. R. Math. Acad. Sci. Paris **347** (2009), no. 3-4, 173–176. [arXiv:0707.2326]

29. S. Casalaina-Martin, *Singularities of the Prym theta divisor*, Ann. of Math. **170** (2009), no. 1, 163–204. [arXiv:math/0405195]

30. S. Casalaina-Martin, M. Lahoz and F. Viviani, *Cohomological support loci for Abel-Prym curves*, Matematiche (Catania) **63** (2008), no. 1, 205–222. [arXiv:0802.3683]

31. S. Casalaina-Martin, *Singularities of theta divisors in algebraic geometry*, Curves and abelian varieties, 25–43, Contemp. Math., **465**, Amer. Math. Soc., Providence, RI, 2008. [arXiv:1207.1042]

32. S. Casalaina-Martin, *Cubic threefolds and abelian varieties of dimension five. II*, Math. Z. **260** (2008), no. 1, 115–125. [arXiv:math/0605666]

33. S. Casalaina-Martin and R. Friedman, *Cubic threefolds and abelian varieties of dimension five*, J. Algebraic Geom. **14** (2005), no. 2, 295–326. [arXiv:math/0307015]

Presentations

- Stony Brook University, *Algebraic Geometry in the Northeast Sector (AGNES)*, October 2020 (Zoom).

- Fields Institute, Toronto, *New Structures in Algebraic Geometry and their Symplectic Interpretations*, August 2019.

- Duke University, *Algebraic Geometry Seminar*, April 2019.

- University of British Columbia, *Algebra and Algebraic Geometry Seminar*, March 2019.

- Texas A&M, *Texas Algebraic Geometry Seminar (TAGS)*, November 2018.

- Texas A&M, *Geometry Seminar*, November 2018.
- Cetraro, Italy, *Conference on Differential, Algebraic and Topological Methods in Complex Algebraic Geometry*, September 2018.
- Leibniz Universität Hannover, Germany, *Workshop on Arithmetic and Geometry of Cubic Hypersurfaces*, August 2018.
- University of Missouri, St. Louis, *Colloquium*, March 2018.
- Washington University, St. Louis, *Algebraic Geometry Seminar*, March 2018.
- University of Barcelona, Spain, *Workshop on Complex Algebraic Geometry – Pirola 60th*, February 2018.
- Humboldt Universität zu Berlin, Germany, *North German Algebraic Geometry Seminar*, November 2017.
- Stony Brook University, *Algebraic Geometry Seminar*, October 2017.
- Università Roma Tre, Italy, *Seminari di Geometria*, October 2017.
- Universität Bielefeld, Germany, *Arithmetic Geometry Seminar*, October 2017.
- Columbia University, *Algebraic Geometry Seminar*, September 2017.
- NYU, *Algebraic Geometry Seminar*, September 2017.
- Boston College, *Number Theory and Algebraic Geometry Seminar*, April 2017.
- Jeju, Korea, *Conference On Moduli and Birational Geometry V*, December 2016.
- International Centre for Theoretical Physics, Trieste, Italy, *Advanced School and Workshop on Moduli Spaces, Mirror Symmetry and Enumerative Geometry*, August 2016.
- Leibniz Universität Hannover, Germany, *Algebraic Geometry Seminar*, June 2016.
- Cambridge University, UK, *Algebraic Geometry Seminar*, June 2016.
- University of Utah, *AMS Summer Institute in Algebraic Geometry*, July 2015.
- Stony Brook University, *New Techniques in Birational Geometry*, April 2015.
- Institute for Advanced Study (IAS), Princeton, *Topology of Algebraic Varieties*, January 2015.
- University of Utah, *Algebraic Geometry Seminar*, December 2014.
- National University of Singapore, Institute of Mathematical Sciences, *Workshop on the Geometry, Topology and Physics of Moduli Spaces of Higgs Bundles*, July 2014.
- Humboldt Universität zu Berlin, Germany, *Forschungsseminar Algebraische Geometrie*, June 2014.
- Università Roma Tre, Italy, *Seminari di Geometria*, June 2014.

- Univeristy of Northern Texas, *Colloquium*, March 2014.
- Stony Brook University, *Algebraic Geometry Seminar*, October 2013.
- Boston College, *Number Theory and Algebraic Geometry Seminar*, October 2013.
- POSTECH, Korea, *Conference on Moduli and Birational Geometry IV*, August 2013.
- San Diego, CA, *Singularities in Geometry and Algebra*, Special Session of the AMS joint meeting, January 2013.
- Mathematisches Forschungsinstitut Oberwolfach, Germany, *Komplexe Analysis*, September 2012,
- Busan, Korea, *Workshop on Moduli and Birational Geometry*, July 2012.
- University of Georgia, *Georgia Algebraic Geometry Symposium*, May 2012.
- University of Washington, *Algebraic Geometry Seminar*, March, 2012.
- National University of Singapore, *Topology and Geometry Seminar*, November 2011.
- Salt Lake City, Utah, *Algebraic Geometry*, Special Session of the AMS meeting, October 2011.
- Maresias, Brazil, *11th Meeting on Algebraic Geometry and Commutative Algebra*, October 2011.
- Colorado State University, *Rocky Mountain Algebraic Combinatorics Seminar*, September 2011.
- CUNY Graduate Center, *Commutative Algebra and Algebraic Geometry Seminar*, November 2010.
- University of Washington, *Colloquium*, October 2010.
- University of British Columbia–University of Washington, *Algebraic Geometry Seminar*, October 2010.
- KIAS, Korea, *Algebraic Geometry Seminar*, August 2010.
- POSTECH, Korea, *Workshop on Moduli and Birational Geometry*, August 2010.
- IMPA, Brazil, *10th Meeting on Algebraic Geometry and Commutative Algebra*, July 2010.
- Stony Brook University, *Seminar on Algebra, Geometry, and Physics*, May 2010.
- University of Colorado, *Great Plains Operator Theory Special Year One Day Conference*, November 2009.
- University of California at San Diego, *Algebraic Geometry Seminar*, October 2009.
- Columbia University, *Algebraic Geometry Seminar*, September 2009.
- California Polytechnic State University, *Colloquium*, May 2009.

- University of British Columbia, Canada, *Algebgraic Geometry Seminar*, April 2009.
- University of Utah, *Western Algebraic Geometry Seminar (WAGS)*, November 2008.
- Colorado State University, *Algebra Seminar*, October 2008.
- University of Illinois at Chicago, *Algebraic Geometry Seminar*, October 2008.
- University of North Carolina, *Colloquium*, February 2008.
- Texas A&M University, *Colloquium*, February 2008.
- Stanford University, *Algebraic Geometry Seminar*, February 2008.
- University of California at Santa Cruz, *Colloquium*, January 2008.
- Rutgers University, *Colloquium*, January 2008.
- University of Toronto, Canada, *Colloquium*, January 2008.
- Harvard University, *Algebraic Geometry Seminar*, December 2007.
- CUNY, Lehman College, *Colloquium*, December 2007.
- University of California at Irvine, *Colloquium*, November 2007.
- University of Georgia, *Curves, abelian varieties, and their interactions; on the occasion of the 65th birthday of Roy Smith*, April 2007.
- University of Michigan, *Algebraic Geometry Seminar*, March 2007.
- Brown University, *Algebraic Geometry Seminar*, March 2007.
- Boston University, *Geometry Seminar*, April 2006.
- University of Chicago, *Algebraic Geometry Seminar*, December 2005.
- Harvard University, *Algebraic Geometry Seminar*, March 2005.
- Stony Brook University, *Algebraic Geometry Seminar*, September 2004.
- Salamanca, Spain, *III Iberoamerican conference on geometry*, June 2004.
- Columbia University, *Algebraic Geometry Seminar*, April 2004.

TEACHING

1. *Abstract algebra 1*, Fall 2021 (University of Colorado). An undergraduate course on Groups, Rings and Fields.
2. *Algebraic geometry*, Spring 2021 (University of Colorado). A graduate introduction to algebraic geometry.
3. *Linear algebra for non-Math Majors*, Spring 2021 (University of Colorado). An undergraduate introduction to linear algebra.
4. *Linear algebra*, Fall 2020 (University of Colorado). An undergraduate introduction to linear algebra.
5. *Intro to discrete mathematics*, Spring 2020 (University of Colorado). An undergraduate course on the language of mathematics and proofs.
6. *Abstract algebra 2*, Spring 2020 (University of Colorado). An undergraduate course in algebra.

7. *Functions of a complex variable 2*, Fall 2019 (University of Colorado). A graduate course in complex analysis and complex algebraic geometry.

8. *Calculus 2*, Fall 2018 (University of Colorado). A second semester undergraduate calculus course. Lectured and served as course coordinator for 16 sections with over 400 students in total, 10 graduate student instructors, 1 instructor, 6 graduate student teaching assistants, and 6 undergraduate learning assistants.

9. *Homological algebra*, Spring 2018 (University of Colorado). Graduate course in homological algebra.

10. *Linear algebra*, Spring 2018 (University of Colorado). An undergraduate introduction to linear algebra.

11. *Functions of a complex variable 2*, Spring 2017 (University of Colorado). A graduate course in complex analysis and complex algebraic geometry.

12. *Abstract algebra 2*, Spring 2017 (University of Colorado). An undergraduate course in algebra.

13. *Abstract algebra 1*, Fall 2016 (University of Colorado). An undergraduate course on Groups, Rings and Fields.

14. *Complex analysis*, Spring 2016 (University of Colorado). An undergraduate course on complex analysis.

15. *Intro to discrete mathematics*, Spring 2016 (University of Colorado). An undergraduate course on the language of mathematics and proofs.

16. *Functions of a complex variable 1*, Fall 2015 (University of Colorado). A graduate course on complex analysis.

17. *Complex analysis*, Spring 2015 (University of Colorado). An undergraduate course on complex analysis.

18. *Euclidean and non-Euclidean geometry*, Spring 2015 (University of Colorado). An undergraduate introduction to Euclidean and non-Euclidean geometry.

19. *Commutative algebra*, Fall 2014 (University of Colorado). A graduate introduction to commutative algebra.

20. *Homological algebra*, Spring 2014 (University of Colorado). Graduate course in homological algebra.

21. *Euclidean and non-Euclidean geometry*, Spring 2014 (University of Colorado). An undergraduate introduction to Euclidean and non-Euclidean geometry.

22. *Analysis 1*, Fall 2013 (University of Colorado). An undergraduate introduction to real analysis.

23. *Introduction to linear algebra*, Spring 2013 (University of Colorado). An undergraduate introduction to linear algebra.

24. *Commutative algebra*, Fall 2012 (University of Colorado). A graduate introduction to commutative algebra.

25. *Analytic geometry and calculus 2*, Spring 2012 (University of Colorado). A second semester undergraduate calculus course. Lectured and served as course coordinator for 8 sections with over 200 students in total, 7 graduate student instructors, 1 instructor, 3 graduate student teaching assistants, and 2 undergraduate learning assistants.

26. *Abstract algebra 2*, Spring 2012 (University of Colorado), A second semester undergraduate course in algebra.

27. *Functions of a complex variable 2*, Spring 2011 (University of Colorado). A second semester graduate course in complex analysis.

28. *Abstract algebra 1*, Spring 2011 (University of Colorado). An undergraduate course on Groups, Rings and Fields.

29. *Algebraic geometry*, Spring 2010 (University of Colorado). A graduate introduction to algebraic geometry.

30. *Abstract algebra 1*, Fall 2009, (University of Colorado). An undergraduate course on Groups, Rings and Fields.

31. *Complex analysis*, Fall 2008 (University of Colorado). An undergraduate course on complex analysis.

32. *Abstract algebra 2*, Spring 2010 (University of Colorado), A second semester undergraduate course in algebra.

33. *Introduction to algebraic geometry II: algebraic surfaces*, Spring 2008 (Harvard). A graduate course focusing on the classification of complex algebraic surfaces.

34. *Theory of schemes II*, Spring 2008 (Harvard). The second semester of a one year graduate course focusing on the theory of schemes, sheaves, and sheaf cohomology.

35. *Introduction to curves and abelian varieties*, Fall 2006 (Harvard). A graduate course on algebraic curves and abelian varieties, focusing on the relation between a curve and its Jacobian.

36. *Calculus 1*, Spring 2005 (Stony Brook). A first semester course in calculus. Served as course coordinator.

37. *Calculus 1*, Fall 2004 (Stony Brook). A first semester course in calculus.

38. *Linear algebra*, Summer 2004 (Columbia). An undergraduate course in linear algebra.

39. *Calculus IA*, Spring 2003 (Columbia). First semester courses in calculus.

40. *College algebra and analytic geometry*, Fall 2002 (Columbia). A one-semester course of pre-calculus.

41. *College algebra and analytic geometry*, Summer 2002 (Columbia). A one-semester course of pre-calculus.

42. *Basic mathematics*, Spring 2002 (Columbia). A course in elementary mathematics as a preparation for pre-calculus.

43. *Calculus I*, Summer 2001 (Columbia). First semester courses in calculus.

Mentoring

- Postdocs
    - Zheng Zhang (2018–2020). Assistant Professor at Shanghai Tech.
- Ph.D. Students
    - Matthew Grimes (Ph.D. 2016). *Relative moduli of vector bundles and the log-minimal model program on the moduli space of curves* [arXiv: 1409.5734]. Visiting Assistant Professor (postoc) at Boston College 2016–2019. Currently a Data Scientist at Unsupervised in Colorado.
    - Krisztian Havasi (Ph.D. 2016). *Geometric realization of strata in the boundary of the intermediate Jacobian locus.* Currently a 3D Modeling Software Engineer in Colorado.
    - Josh Frinak (Ph.D. 2018). *Degeneration of Prym Varieties: A computational approach to the indeterminacy locus of the Prym map and degenerations of cubic threefolds.* Business Analyst at Gaia in Louisville, Colorado. Currently a Data Scientist at Facebook in Seattle, Washington.
- Masters Students
    - Yu Wang (M.S. 2019). Ph.D. student with Mark Gross at Cambridge University.
- Undergraduate Honors Students
    - Jerett Cherry (B.A. 2019) summa cum laude, *A compendium of Riemann surfaces and algebraic curves*.
    - Henry Fontana (B.A. 2020), cum laude *Hodge theory*.
    - Ryan Mike (B.A. 2020), summa cum laude, *Cohomology theories in algebraic geometry*. Currently a PhD student in mathematics at UC San Diego.

SERVICE

- Co-organizer of the Special Session on Algebraic Cycles in Arithmetic and Geometry at the AMS-JMM Joint Meeting held in Denver Colorado, January 2020.
- Co-organizer of the workshop Perspectives on Complex Algebraic Geometry, in honor of Bob Friedman's 60th birthday, May 2015 at Columbia University.
- Co-organizer of the Spring 2014 Western Algebraic Geometry Symposium (WAGS) at the University of Colorado.
- Co-organizer of the Front Range Algebra, Geometry and Number Theory Seminar (FRAGMENT), joint with CSU, Fall 2009-present.

- Co-organizer of the Western Algebraic Geometry Symposium (WAGS) held at CSU in Fall 2011.
- Long-term organizing for the Western Algebraic Geometry Symposium (WAGS), Fall 2009-present.
- Co-organizer of the special session on Algebraic Geometry at the AMS sectional meeting held at the University of Colorado, Spring 2013.
- Organizer of the What next? Jobs after a Math PhD seminar at the University of Colorado, Fall 2020–present.
- Organizer of the University of Colorado Department of Mathematics Kempner Colloquium, Fall 2011–Spring 2015.
- Co-organizer of a working seminar on Stacks, Groupoids, and Deformation Theory at the University of Colorado, 2009-2012.
- Committee work (University of Colorado): Arts and Sciences Council Department Representative, Arts and Sciences Council Faculty Affairs Committee.
- Committee work (Department of Mathematics, University of Colorado): Executive Committee, Hiring Committees, deLong Committee, Diversity Committee, Preliminary and Comprehensive Exam Committees, Graduate Committee, Algebra Committee, Geometry Committee. Thesis reader for students at the University of Colorado, Leibniz University Hannover, Harvard, and Tufts.
- Advising of graduate students: Matthew Grimes (Ph.D. 2016), Krisztian Havasi (Ph.D. 2016). Josh Frinak (Ph.D. 2018). Yu Wang (M.S. 2019).
- NSF and NSA grant proposal evaluation.
- Refereed articles for journals including Advances in Mathematics, Algebraic Geometry, Archiv der Mathematik, Bulletin of the London Mathematics Society, Communications in Algebra, Compositio Mathematica, Contemporary Mathematics, Documenta Mathematica, International Mathematics Research Notices (IMRN), Journal of Algebraic Geometry, Mathematische Nachrichten, Monatshefte für Mathematik, Selecta Mathematica, Transactions of the American Mathematics Society. Quick opinions for Inventiones Mathematicae, Journal of the European Mathematics Society (JEMS).