

List of Works by Alessio Corti*

Recent arXiv articles

1. *Hodge-Theoretic Mirror Symmetry for Toric Stacks* (with Tom Coates, Hiroshi Iritani, and Hsian-Hua Tseng), [arXiv:1606.07254](#). 58 pp., submitted to Journal für die reine und angewandte Mathematik (Crelle's Journal)
2. *Del Pezzo surfaces with $1/3(1,1)$ points* (with Liana Heuberger), [arXiv:1505.02092](#), 42 pp., to appear on Manuscripta Mathematica
3. *The Sarkisov program for Mori fibred Calabi–Yau pairs* (with Anne-Sophie Kaloghiros), [arXiv:1504.00557](#), 12 pp., accepted for publication on Algebraic Geometry
4. *Some Applications of the Mirror Theorem for Toric Stacks* (with Tom Coates, Hiroshi Iritani and Hsian-Hua Tseng), [arXiv:math.AG/1401.2611](#), 23 pp., submitted

Journal articles

5. *Erratum to “Conifold transitions and Mori theory* (with Ivan Smith), *Math. Res. Lett.* **23**, No. 3, 2016, 733-734
6. *Quantum Periods for 3-Dimensional Fano Manifolds* (with Tom Coates, Sergey Galkin and Alexander Kasprzyk), *Geom. Topol.* **20**, no. 1, 2016, 103–256
7. *Mirror symmetry and the classification of orbifold del Pezzo surfaces* (with Mohammad Akhtar, Tom Coates, Liana Heuberger, Alexander Kasprzyk, Alessandro Oneto and Andrea Petracci), *Proc. Amer. Math. Soc.* **144**, No. 2, 2016, 513–527

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8. *A Mirror Theorem for Toric Stacks* (with Tom Coates, Hiroshi Iritani and Hsian-Hua Tseng), *Comp. Math.* **151**, 2015, 1878–1912
9. *G_2 -manifolds and associative submanifolds via semi-Fano 3-folds* (with Mark Haskins, Johannes Nordström and Tommaso Pacini), *Duke Math. J.* **164**, No. 10, 2015, 1971–2092
10. *Asymptotically cylindrical Calabi–Yau 3-folds from weak Fano 3-folds* (with Mark Haskins, Johannes Nordström and Tommaso Pacini), *Geom. Topol.* **17**, no. 4, 2013, pp. 1955–2059
11. *New outlook on the Minimal Model Program, II* (with Vladimir Lazić), *Math. Ann.* **356**, no. 2, 2013, pp. 617–633
12. *Hypergeometric equations and weighted projective spaces* (with Vasily Golyshev), *Sci. China Math.* **54**, no. 8, 2011, pp. 1577–1590
13. *Introduction to the minimal model program and the existence of flips*, (with Anne-Sophie Kaloghiros and Vladimir Lazić), *Bull. Lond. Math. Soc.* **43**, no. 3, 2011, pp. 415–418
14. *Three equivalent conjectures on the birational geometry of Fano 3-folds*, *Tr. Mat. Inst. Steklova* **264**, *Mnogomernaya Algebraicheskaya Geometriya*, 2009, pp. 52–54; translation in *Proc. Steklov Inst. Math.* **264**, no. 1, 2009, pp. 45–47
15. *The quantum orbifold cohomology of weighted projective spaces* (with Tom Coates, Yuan-Pin Lee and Hsian-Hua Tseng), *Acta Math.* **202**, no. 2, 2009, pp. 39–193
16. *Computing genus-zero twisted Gromov–Witten invariants* (with Tom Coates, Hiroshi Iritani and Hsian-Hua Tseng), *Duke Math. J.* **147**, no. 3, 2009, pp. 377–438
17. *Motivic decomposition and Intersection Chow Groups II* (with Masaki Hanamura), *Pure Appl. Math. Q.* **3**, no 1, part 3, 2007, pp. 181–203
18. *Conifold transitions and Mori theory* (with Ivan Smith), *Math. Res. Lett.* **12**, no. 5-6, 2005, pp. 767–778
19. *What is...a flip?*, *Notices Amer. Math. Soc.* **51**, 2004, pp. 1350–1351

20. *Birational geometry of terminal quartic 3-folds I* (with Massimiliano Mella), Amer. J. Math. **126**, no. 4, 2004, pp. 739–761
21. *Twisted bundles and admissible covers* (with Dan Abramovich and Angelo Vistoli), Comm. Algebra **31**, no. 8, 2003 (special issue in honor of Steven L. Kleiman), pp. 3547–3618
22. *Motivic decomposition and Intersection Chow Groups I* (with Masaki Hanamura), Duke Math. J. **103**, no. 3, 2000, pp. 459–522
23. *Del Pezzo surfaces over Dedekind schemes*, Ann. of Math. (2) **144**, no. 3, 1996, pp. 641–683
24. *Factoring birational maps of threefolds after Sarkisov*, J. Algebraic Geom. **4**, no. 2, 1995, pp. 223–254
25. *Polynomial bounds on the number of automorphisms of a surface of general type*, Ann. Scient. Éc. Norm. Sup. (4) **24**, no. 1, 1991, pp. 113–137

Conference proceedings articles

26. *Mirror Symmetry and Fano Manifolds* (with Tom Coates, Sergey Galkin, Vasily Golyshev and Alexander Kasprzyk), European Congress of Mathematics (Kraków, 2-7 July, 2012), November 2013 (824 pages), pp. 285–300, ISBN 978-3-03719-120-0, DOI 10.4171/120
27. *Finite generation of adjoint rings after Lazić: an introduction*, Classification of algebraic varieties, pp. 197–220, EMS Ser. Congr. Rep., Eur. Math. Soc., Zürich, 2011
28. *Lectures on flips and minimal models* (with Paul Hacking, János Kollár, Robert Lazarsfeld and Mircea Mustață), Analytic and algebraic geometry, pp. 557–583, IAS/Park City Math. Ser. **17**, Amer. Math. Soc., Providence, RI, 2010
29. *Birational geometry of 3-fold Mori fibre spaces* (with Gavin Brown and Francesco Zucconi), Proceedings of the Fano Conference (Torino, Italy, 29 Sept.–5 Oct. 2002), A. Conte, A. Collino and M. Marchisio Eds., Torino, 2004, pp. 235–275

30. *Weighted Grassmannians* (with Miles Reid), in “Algebraic Geometry (a volume in memory of Paolo Francia)”, M. C. Beltrametti, F. Catanese, C. Ciliberto, A. Lanteri and C. Pedrini Eds., Walter de Gruyter, Berlin and New York, 2002, pp. 141–163
31. *Recent results in higher dimensional birational geometry*, in “Complex Algebraic Geometry”, MSRI Publications **28**, 1995, pp. 35–56

Book chapters

32. *Saturated mobile b -divisors on weak del Pezzo klt surfaces* (with James McKernan, and Hiromichi Takagi), in “Flips for 3-folds and 4-folds”, Oxford Lecture Series in Mathematics and Its Applications **35**, A. Corti Ed., Oxford University Press, 2007, pp. 111–120
33. *3-fold flips after Shokurov*, in “Flips for 3-folds and 4-folds”, Oxford Lecture Series in Mathematics and Its Applications **35**, A. Corti Ed., Oxford University Press, 2007, pp. 18–48
34. *Singularities of linear systems and 3-fold birational geometry*, in “Explicit Birational Geometry of 3-folds”, London Math. Soc. Lecture Note Ser. **281**, A. Corti and M. Reid Eds., Cambridge University Press, 2000, pp. 259–312
35. *Fano 3-fold hypersurfaces* (with Aleksandr Pukhlikov and Miles Reid), in “Explicit Birational Geometry of 3-folds”, London Math. Soc. Lecture Note Ser. **281**, A. Corti and M. Reid Eds., Cambridge University Press, 2000, pp. 175–258
36. *Adjunction of log divisors*, in “Flips and abundance for threefolds”, Astérisque **211**, 1992, pp. 171–182
37. *Existence of terminal flips* (with János Kollár), in “Flips and abundance for threefolds”, Astérisque **211**, 1992, pp. 69–73

Books

38. *Rational and nearly rational varieties* (main authors János Kollár and Karen Smith), Cambridge Studies in Advanced Mathematics **92**, Cam-

bridge University Press, Cambridge, 2004. vi+235 pp.

Books edited

39. *Explicit birational geometry of 3-folds*, London Math. Soc. Lecture Note Ser. **281**, A. Corti and M. Reid Eds., Cambridge University Press, 2000, v+349 pp.
40. *Flips for 3-folds and 4-folds*, Oxford Lecture Series in Mathematics and Its Applications **35**, A. Corti Ed., Oxford University Press, 2007, 200 pp.

Unpublished

41. *The work of Hacon and McKernan*, unpublished manuscript based on notes for a talk not given at the Clay Institute on the occasion of the research award to Hacon and McKernan, November 2009, 19 pp., available at http://www.claymath.org/library/research_award/corti.pdf
42. *Semistable 3-fold flips*, arXiv:math.AG/9505035, 1995, 14 pp.; appeared in substantially revised form as Chapter 7 of the book *Birational Geometry of Algebraic Varieties*, by János Kollár and Shigefumi Mori (with the collaboration of C. Herbert Clemens and Alessio Corti), Cambridge Tracts in Mathematics **134**, Cambridge University Press, 1998, viii+254 pp.
43. *Families of Del Pezzo surfaces*, University of Utah PhD dissertation, 1992, 58 pp.

Outreach Publications

44. *Drawing in Mathematics: From Inverse Vision to the Liberation of Form* (with Gemma Anderson, Dorothy Buck and Tom Coates), Leonardo **48**, No. 5, 2015, 439–448

45. *Mathematics and Art: notes from an artistic collaboration* (with Gemma Anderson), in “Imagine Maths 4. Between Culture and Mathematics”, M. Emmer, M. Abate and M. Villareal Eds., Unione Matematica Italiana, 2015
46. *Drawing and Mathematics: Geometry, Reasoning, and Form* (with Gemma Anderson, Dorothy Buck and Tom Coates), TRACEY journal special edition: Drawing in STEAM, 2014