

Publications

Updated, October 10, 2010

1. Shokurov's ACC Conjecture for log canonical thresholds on smooth varieties (with T. de Fernex and L. Ein), *Duke Math. J.* **152** (2010), 93–114.
2. Positivity for toric vector bundles (with M. Hering and S. Payne), *Ann. Inst. Fourier (Grenoble)* **60** (2010), 607–640.
3. Toward an inductive description of singularities of pairs, to appear in *J. Alg. Geom.*
4. F -thresholds of hypersurfaces (with M. Blickle and K. E. Smith), *Trans. Amer. Math. Soc.* **361** (2009), 6549–6565.
5. Convex bodies associated to linear series (with R. Lazarsfeld), *Ann. Sci. École Norm. Sup.(4)* **42** (2009), 783–835.
6. T. de Fernex and M. Mustața, Limits of log canonical thresholds, *Annales Sci. École Norm. Sup. (4)* **42** (2009), 491–515.
7. L. Ein, R. Lazarsfeld, M. Mustața, M. Nakamaye and M. Popa, Restricted volumes and base loci of linear series, *Amer. J. Math.* **131** (2009), 571–605.
8. Generically finite morphisms and formal neighborhoods of arcs (with L. Ein), *Geom. Dedicata* **139** (2009), 331–335.
9. Test ideals vs. multiplier ideals (with K. Yoshida), *Nagoya Math. J.* **193** (2009), 111–128.
10. Bernstein-Sato polynomials in positive characteristic, *J. Algebra* **321** (2009), 128–151.
11. Jet schemes and singularities (with L. Ein), in *Algebraic geometry—Seattle 2005, Part 2*, 505–546, *Proc. Sympos. Pure Math.*, **80**, Part 2, Amer. Math. Soc., Providence, RI, 2009.
12. Discreteness and rationality of F -thresholds (with M. Blickle and K. E. Smith), Special volume in honor of Melvin Hochster, *Michigan Math. J.* **57** (2008), 43–61.
13. F -thresholds, tight closure, integral closure, and multiplicity bounds (with C. Huneke, S. Takagi, and K.-i. Watanabe), Special volume in honor of Melvin Hochster, *Michigan Math. J.* **57** (2008), 463–483.
14. On Igusa zeta functions for monomial ideals (with J. Howald and C. Yuen), *Proc. Amer. Math. Soc.* **135** (2007), 3425–3433.
15. Invariants of singularities of pairs (with L. Ein), *International Congress of Mathematicians*, Vol. II, 583–602, Eur. Math. Soc., Zürich, 2006.

16. Multiplier ideals of hyperplane arrangements, *Trans. Amer. Math. Soc.* **358** (2006), 5015–5023.
17. Asymptotic invariants of base loci (with L. Ein, R. Lazarsfeld, M. Nakamaye and M. Popa), *Ann. Inst. Fourier (Grenoble)* **56** (2006), 1701–1734.
18. Combinatorial description of the roots of the Bernstein-Sato polynomials for monomial ideals (with N. Budur and M. Saito), *Comm. Algebra* **34** (2006), 4103–4117.
19. Bernstein-Sato polynomials of arbitrary varieties (with N. Budur and M. Saito), *Compos. Math.* **142** (2006), 779–797.
20. Roots of Bernstein-Sato polynomials for monomial ideals: a positive characteristic approach (with N. Budur and M. Saito), *Math. Res. Lett.* **13** (2006), 125–142.
21. Ehrhart polynomials and stringy Betti numbers (with S. Payne), *Math. Ann.* **333** (2005), 787–795.
22. Asymptotic invariants of line bundles (with L. Ein, R. Lazarsfeld, M. Nakamaye and M. Popa) *Pure Appl. Math. Q.* **1** (2005), 379–403.
23. F-thresholds and Bernstein-Sato polynomials (with S. Takagi and K.-i. Watanabe), *European Congress of Mathematics*, 341–364, *Eur. Math. Soc.*, Zürich, 2005.
24. Inversion of adjunction for local complete intersection varieties (with L. Ein), *Amer. J. Math.* **126** (2004), 1355–1365
25. Contact loci in arc spaces (with L. Ein and R. Lazarsfeld), *Compos. Math.* **140** (2004), 1229–1244.
26. Multiplicities and log canonical threshold (with L. Ein and T. de Fernex), *J. Alg. Geom.* **13** (2004), 603–615.
27. Universal rational parametrizations and toric varieties (with D. Cox and R. Krasauskas) in *Topics in algebraic geometry and geometric modeling*, 241–265, *Contemp. Math.*, 334, *Amer. Math. Soc.*, Providence, RI, 2003.
28. Jet schemes, log discrepancies and Inversion of Adjunction (with L. Ein and T. Yasuda), *Invent. Math.* **153** (2003), 119–135.
29. Divisors on $\mathcal{M}_{g,g+1}$ and the minimal resolution conjecture for points on canonical curves (with G. Farkas and M. Popa), *Ann. Sci. École Norm. Sup. (4)* **36** (2003), 553–581.
30. Bounds for log canonical thresholds with applications to birational rigidity (with T. de Fernex and L. Ein), *Math. Res. Lett.* **10** (2003), 219–236.
31. On multiplicities of graded sequences of ideals, *J. Algebra* **256** (2002), 229–249.

32. Singularities of pairs via jet schemes, *J. Amer. Math. Soc.* **15** (2002), 599–615.
33. The multiplier ideals of a sum of ideals, *Trans. Amer. Math. Soc.* **354** (2002), 205–217.
34. Vanishing theorems on toric varieties, *Tohoku Math. J.(2)* **54** (2002), 451–470.
35. Jet schemes of locally complete intersection canonical singularities (with an appendix by D. Eisenbud and E. Frenkel), *Invent. Math.* **145** (2001), 397–424.
36. The module of logarithmic p-forms of a locally free arrangement (with H. Schenck), *J. Algebra* **241** (2001), 699–719.
37. D-modules on smooth toric varieties (with G. Smith, H. Tsai and U. Walther), *J. Algebra* **240** (2001), 744–770.
38. Cohomology on toric varieties and local cohomology with monomial supports (with D. Eisenbud and M. Stillman), *J. Symbolic Comput.* **29** (2000) 583–600.
39. Local cohomology at monomial ideals, *J. Symbolic Comput.* **29** (2000) 709–720.
40. Graded Betti numbers of general finite subsets of points on projective varieties, *Le Matematiche* **LIII** (1998) Supplemento, 53–81.
41. A new proof of a theorem of A. Van de Ven (with M. Popa), *Bull. Math. Soc. Sc. Math. Roum.* **40(88)** (1997) 49–55.

Preprints and work in preparation

1. The Monodromy Conjecture for hyperplane arrangements (with N. Budur and Z. Teitler), preprint, math. arXiv:0906.1991.
2. Log canonical thresholds on varieties with bounded singularities (with T. de Fernex and L. Ein), preprint, arXiv:1004.3336.
3. Sequences of LCT-polytopes (with A. Libgober), preprint, arXiv:1002.4163.
4. Valuations and asymptotic invariants for sequences of ideals (with M. Jonsson), in preparation.
5. Ordinary varieties, and the comparison between multiplier ideals and test ideals (with V. Srinivas), in preparation.