

## Publications

- (1) Invariants of singularities of pairs (with L. Ein), to appear in *Proceedings of the International Congress of Mathematicians, Madrid, Spain, 2006*.
- (2) On Igusa zeta functions for monomial ideals (with J. Howald and C. Yuen), to appear in *Proc. Amer. Math. Soc.*
- (3) Multiplier ideals of hyperplane arrangements, to appear in *Trans. Amer. Math. Soc.*
- (4) Asymptotic invariants of base loci (with L. Ein, R. Lazarsfeld, M. Nakamaye and M. Popa), to appear in *Ann. Inst. Fourier*.
- (5) Combinatorial description of the roots of the Bernstein-Sato polynomials for monomial ideals (with N. Budur and M. Saito), to appear in *Comm. Algebra*.
- (6) Bernstein-Sato polynomials of arbitrary varieties (with N. Budur and M. Saito), *Compos. Math.* **142** (2006), 779–797.
- (7) 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.
- (8) Ehrhart polynomials and stringy Betti numbers (with S. Payne), *Math. Ann.* **333** (2005), 787–795.
- (9) Asymptotic invariants of line bundles (with L. Ein, R. Lazarsfeld, M. Nakamaye and M. Popa) *Pure Appl. Math. Q.* **1** (2005), 379–403.
- (10) F-thresholds and Bernstein-Sato polynomials (with S. Takagi and K.-i. Watanabe), *European Congress of Mathematics*, 341–364, *Eur. Math. Soc.*, Zrich, 2005.
- (11) Inversion of adjunction for local complete intersection varieties (with L. Ein), *Amer. J. Math.* **126** (2004), 1355–1365
- (12) Contact loci in arc spaces (with L. Ein and R. Lazarsfeld), *Compos. Math.* **140** (2004), 1229–1244.
- (13) Multiplicities and log canonical threshold (with L. Ein and T. de Fernex), *J. Alg. Geom.* **13** (2004), 603–615.
- (14) 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.
- (15) Log discrepancies, jet schemes and Inversion of Adjunction (with L. Ein and T. Yasuda), *Invent. Math.* **153** (2003), 119–135.

- (16) 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. cole Norm. Sup. (4)* **36** (2003), 553–581.
- (17) Bounds for log canonical thresholds with applications to birational rigidity (with T. de Fernex and L. Ein), *Math. Res. Lett.* **10** (2003), 219–236.
- (18) On multiplicities of graded sequences of ideals, *J. Algebra* **256** (2002), 229–249.
- (19) Singularities of pairs via jet schemes, *J. Amer. Math. Soc.* **15** (2002), 599–615.
- (20) The multiplier ideals of a sum of ideals, *Trans. Amer. Math. Soc.* **354** (2002), 205–217.
- (21) Vanishing theorems on toric varieties, *Tohoku Math. J.(2)* **54** (2002), 451–470.
- (22) Jet schemes of locally complete intersection canonical singularities (with an appendix by D. Eisenbud and E. Frenkel), *Invent. Math.* **145** (2001), 397–424.
- (23) The module of logarithmic p-forms of a locally free arrangement (with H. Schenck), *J. Algebra* **241** (2001), 699–719.
- (24) D-modules on smooth toric varieties (with G. Smith, H. Tsai and U. Walther), *J. Algebra* **240** (2001), 744–770.
- (25) Cohomology on toric varieties and local cohomology with monomial supports (with D. Eisenbud and M. Stillman), *J. Symbolic Comput.* **29** (2000) 583–600.
- (26) Local cohomology at monomial ideals, *J. Symbolic Comput.* **29** (2000) 709–720.
- (27) Graded Betti numbers of general finite subsets of points on projective varieties, *Le Matematiche* **LIII** (1998) Supplemento, 53–81.
- (28) 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 papers in preparation

- (1) Discreteness and rationality of  $F$ -thresholds (with M. Blickle and K. E. Smith), [math.AG/0607660](#).
- (2) Restricted volumes and base loci of linear series (with L. Ein, R. Lazarsfeld, M. Nakamaye and M. Popa, [math.AG/0607221](#)).
- (3) Singularities and jet schemes (with L. Ein), in preparation.
- (4)  $F$ -thresholds of hypersurfaces (with M. Blickle and K. E. Smith), in preparation.