DAVID EISENBUD

$\begin{array}{c} {\rm eisenbud.io.github.com} \\ {\rm SELECTED~PUBLICATIONS} \end{array}$

10 Representative Publications

- 1. What Makes a Complex Exact? (with D. A. Buchsbaum), J. of Alg., 25 (1973) 259–268.
- 2. Every Algebraic Set in n-Space is the Intersection of n Hypersurfaces (with E. G. Evans), Invent. Math. 19 (1973) 107–112.
- 3. An algebraic formula for the degree of a C^{∞} map germ (with H. Levine), Annals of Math. 106 (1977) 19–44.
- 4. Homological Algebra over a Complete Intersection, Trans. Am. Math. Soc. 260 (1980), 35–63.
- 5. Gorenstein ideals of height 3 (with D.A. Buchsbaum), In Seminar D. Eisenbud/B. Singh/W. Vogel, Vol. 2, volume 48 or Teubner-Texte zur Math., (30–48. Teubner, Leipzig, (1982).
- 5. Three dimensional Link Theory and Invariants of Plane Curve Singularities, (with W. Neumann), Annals of Math. Studies 110, Princeton University Press Princeton NJ (1985).
- 6. The Kodaira dimension of the moduli space of curves of genus ≥ 23 (with J. Harris), Invent. Math. 90 (1987) 359–387.
- 7. Commutative Algebra With A View Toward Algebraic Geometry, Graduate Text 150, Springer-Verlag, 1995.
- 8. Exterior algebra methods for the minimal resolution conjecture (with Sorin Popescu, Frank-Olaf Schreyer, and Charles Walter). Duke Math. J. 112 (2002), no. 2, 379–395.
- 9. Resultants and Chow forms via exterior syzygies. (with F.-O. Schreyer and J. Weyman). J. Amer. Math. Soc. **16** (2003), 537–579.
- 10. Betti Numbers of Graded Modules and Cohomology of Vector Bundles (with Frank-Olaf Schreyer). Jour. Amer. Math. Soc., (2009), no. 3, 859–888.

Publications, Last Three Years

- 1. Quadratic complete intersections. (with I. Peeva and F.-O. Schreyer) J. Algebra 571 (2021), 15–31.
- 2. Layered resolutions of Cohen-Macaulay modules (with I. Peeva). J. Eur. Math. Soc. (JEMS) 23 (2021), no. 3, 845–867.
- 3. Tate resolutions and MCM approximations. Commutative algebra150 years with Roger and Sylvia Wiegand, 35–47, Contemp. Math., 773,
- 4. Classical Algebraic Geometry (O. Debarre, G. Farkas and R. Vakil; Oberwolfach Rep. 18 (2021), no. 2, 1519–1577.

2022

- 5. Remembering David Buchsbaum (with J. Weyman) Notices Amer. Math. Soc. 69 (2022), no. 1, 76–87.
- 6. Mathematics at the airport? Why sure! (with N. Mullen and C. Stoll) Notices Amer. Math. Soc. 69 (2022), no. 4, 612–615.
- 7. Linearity of free resolutions of monomial ideals (with H. Dao) Res. Math. Sci. 9 (2022), no. 2, Paper No. 35, 15 pp.
- 7. Residual Intersections of 2xn determinantal ideals (with Bernd Ulrich) submitted to the volume in honor of Shiing-Shen Chern, accepted for the Journal Algebraic Geometry and Physics, Tsinghua, China.
- 8. Burch Index, Summands of Syzygies and Linearity in Resolutions (with H. Dao) submitted to Bulletin of the Iranian Mathematical Society.
- 9. F.S. Macaulay: From Plane Curves to Gorenstein Rings (with Jeremy Gray) Bull. Am. Math. Soc..
- 10. Residual Intersections and Linear Powers (with C. Huneke, B. Ulrich) To appear, Trans. Am. Math. Soc.
- 11. Practical Curves (Graduate Textbook, approximately 400 pages) To appear, American Mathematical Society.