

Publications on Normaliz

- [1] ABBOTT, J., BIGATTI, A. M., AND SÖGER, C. Integration of libnormaliz in CoCoALib and CoCoA 5. In *Mathematical software – ICMS 2014. 4th international congress, Seoul, South Korea, August 5–9, 2014. Proceedings*. Berlin: Springer, 2014, pp. 647–653.
- [2] BRUNS, W. Algebraic polytopes in normaliz. In *Mathematical Software – ICMS 2020* (Cham, 2020), A. M. Bigatti, J. Carette, J. H. Davenport, M. Joswig, and T. de Wolff, Eds., Springer International Publishing, pp. 193–201.
- [3] BRUNS, W. Automorphism groups and normal forms in Normaliz. *arXiv e-prints* (Dec. 2021), arXiv:2112.08145.
- [4] BRUNS, W. Polytope volume in Normaliz. *arXiv e-prints* (Dec. 2021), arXiv:2112.09518.
- [5] BRUNS, W., HEMMECKE, R., ICHIM, B., KÖPPE, M., AND SÖGER, C. Challenging computations of Hilbert bases of cones associated with algebraic statistics. *Exp. Math.* 20, 1 (2011), 25–33.
- [6] BRUNS, W., AND ICHIM, B. Normaliz: Algorithms for affine monoids and rational cones. *J. Algebra* 324, 5 (2010), 1098–1113.
- [7] BRUNS, W., AND ICHIM, B. Polytope volume by descent in the face lattice and applications in social choice. *Math. Prog. Comp.* 1113 (2020), 416–442.
- [8] BRUNS, W., AND ICHIM, B. Computations of volumes in five candidates elections. *arXiv e-prints* (Sept. 2021), arXiv:2109.00473.
- [9] BRUNS, W., ICHIM, B., AND SÖGER, C. Introduction to Normaliz 2.5. In *Mathematical software – ICMS 2010. Third international congress on*

mathematical software, Kobe, Japan, September 13–17, 2010. Proceedings. Berlin: Springer, 2010, pp. 209–212.

- [10] BRUNS, W., ICHIM, B., AND SÖGER, C. The power of pyramid decomposition in Normaliz. *J. Symb. Comput.* 74 (2016), 513–536.
- [11] BRUNS, W., ICHIM, B., AND SÖGER, C. Computations of volumes and Ehrhart series in four candidates elections. *Ann. Oper. Res.* 280, 1-2 (2019), 241–265.
- [12] BRUNS, W., AND KÄMPF, G. A Macaulay2 interface for Normaliz. *J. Softw. Algebra Geom.* 2 (2010), 15–19.
- [13] BRUNS, W., AND KOCH, R. Computing the integral closure of an affine semigroup. *Zesz. Nauk. Uniw. Jagiell., Univ. Jagell. Acta Math.* 1255 (2001), 59–70.
- [14] BRUNS, W., SIEG, R., AND SÖGER, C. The Subdivision of Large Simplicial Cones in Normaliz. In *MathematicalSoftware – ICMS 2016. 5th International Conference Berlin, Germany, July 11–14, 2016. Proceedings.* Berlin: Springer, p. 1026.
- [15] BRUNS, W., SIEG, R., AND SÖGER, C. Normaliz 2013–2016. In *Algorithmic and experimental methods in algebra, geometry, and number theory.* Springer, Cham, 2017, pp. 123–146.
- [16] BRUNS, W., AND SÖGER, C. Recent developments in normaliz. In *Mathematical software – ICMS 2014. 4th international congress, Seoul, South Korea, August 5–9, 2014. Proceedings.* Berlin: Springer, 2014, pp. 663–668.
- [17] BRUNS, W., AND SÖGER, C. The computation of generalized Ehrhart series in normaliz. *J. Symb. Comput.* 68 (2015), 75–86.
- [18] KOCH, R. *Affine monoids, Hilbert bases and Hilbert functions.* Ph D. thesis, Univ. Osnabrück, Fachbereich Mathematik/Informatik, 2003.
- [19] SÖGER, C. *Parallel Algorithms for Rational Cones and Affine Monoids.* PhD. thesis, Univ. Osnabrück, Fachbereich Mathematik/Informatik, 2014.