

RECENT DEVELOPMENTS IN COMMUTATIVE ALGEBRA

MSRI / SLMath Workshop, April 15 to 19, 2024

BOOKS

- [1] W. BRUNS and J. HERZOG, *Cohen–Macaulay rings*, 2nd ed., Cambridge Studies in Advanced Mathematics **39**, Cambridge University Press, Cambridge, UK, 1998, ISBN 0-521-56674-6. [MR 1251956](#). [Zbl 0909.13005](#). [doi: 10.1017/CBO9780511608681](#).
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- [3] C. HUNEKE and I. SWANSON, *Integral closure of ideals, rings, and modules*, London Mathematical Society Lecture Note Series **336**, Cambridge University Press, Cambridge, UK, 2006, ISBN 978-0-521-68860-4; 0-521-68860-4. [MR 2266432](#). [Zbl 1117.13001](#). <https://www.math.purdue.edu/~iswanso/book/SwansonHuneke.pdf>.
- [4] S. B. IYENGAR, G. J. LEUSCHKE, A. LEYKIN, C. MILLER, E. MILLER, A. K. SINGH, and U. WALTHER, *Twenty-four hours of local cohomology*, Graduate Studies in Mathematics **87**, American Mathematical Society, Providence, RI, 2007, ISBN 978-0-8218-4126-6. [MR 2355715](#). [Zbl 1129.13001](#). [doi: 10.1090/gsm/087](#).
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IMPORTANT PAPERS

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- [2] B. BHATT, On the direct summand conjecture and its derived variant, *Invent. Math.* **212** (2018), no. 2, 297–317. [MR 3787829](#). [Zbl 1397.13019](#). [doi: 10.1007/s00222-017-0768-7](#).
- [3] M. HOCHSTER and C. HUNEKE, Tight closure, invariant theory, and the Briançon–Skoda theorem, *J. Amer. Math. Soc.* **3** (1990), no. 1, 31–116. [MR 1017784](#). [Zbl 0701.13002](#). [doi: 10.1090/S0894-0347-1990-1017784-6](#).
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- [1] L. L. AVRAMOV, R.-O. BUCHWEITZ, S. B. IYENGAR, and C. MILLER, Homology of perfect complexes, *Adv. Math.* **223** (2010), no. 5, 1731–1781. [MR 2592508](#). [Zbl 1186.13006](#). doi: [10.1016/j.aim.2009.10.009](#).
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