

BIBLIOGRAPHY

References

- [AB57] Maurice Auslander and David A. Buchsbaum, *Homological dimension in local rings*, Trans. Amer. Math. Soc. **85** (1957), 390–405.
- [Abb00] Ahmed Abbes, *Réduction semi-stable des courbes d’après Artin, Deligne, Grothendieck, Mumford, Saito, Winters, ...*, Courbes semi-stables et groupe fondamental en géométrie algébrique (Luminy, 1998), Progr. Math., vol. 187, Birkhäuser, Basel, 2000, pp. 59–110.
- [Abb10] ———, *Éléments de géométrie rigide. Volume I*, Progress in Mathematics, vol. 286, Birkhäuser/Springer Basel AG, Basel, 2010.
- [ABD⁺66] Michael Artin, Jean-Etienne Bertin, Michel Demazure, Alexander Grothendieck, Pierre Gabriel, Michel Raynaud, and Jean-Pierre Serre, *Schémas en groupes*, Séminaire de Géométrie Algébrique de l’Institut des Hautes Études Scientifiques, Institut des Hautes Études Scientifiques, Paris, 1963/1966.
- [ACGH85] Enrico Arbarello, Maurizio Cornalba, Philip Augustus Griffiths, and Joseph Daniel Harris, *Geometry of algebraic curves: Volume I*, Grundlehren der mathematischen Wissenschaften, no. 267, Springer-Verlag, 1985.
- [ACV03] Dan Abramovich, Alessio Corti, and Angelo Vistoli, *Twisted bundles and admissible covers*, Communications in Algebra **31** (2003), no. 8, 3547–3618, Special issue in honor of Steven L. Kleiman.
- [AD83] Michael Artin and Jan Denef, *Smoothing of a ring homomorphism along a section*, Arithmetic and geometry, Vol. II, Progr. Math., vol. 36, Birkhäuser Boston, Mass., 1983, pp. 5–31.
- [AGV71] Michael Artin, Alexander Grothendieck, and Jean-Louis Verdier, *Theorie de topos et cohomologie étale des schémas I, II, III*, Lecture Notes in Mathematics, vol. 269, 270, 305, Springer, 1971.
- [AGV08] Dan Abramovich, Tom Graber, and Angelo Vistoli, *Gromov-Witten theory of Deligne-Mumford stacks*, American Journal of Mathematics **130** (2008), no. 5, 1337–1398.
- [AK77] Allen Altman and Steven Kleiman, *Foundations of the theory of Fano schemes*, Compositio Mathematica **34** (1977), no. 1, 3–47.
- [AK10] Valery Alexeev and Allen Knutson, *Complete moduli spaces of branchvarieties*, Journal für die reine und angewandte Mathematik **639** (2010).
- [Ale96] Valery Alexeev, *Moduli spaces $m_{g,n}(w)$ for surfaces*, Higher dimensional complex varieties (Trento, 1994), de Gruyter, 1996, pp. 1–22.
- [Alp08] Jarod Alper, *Good moduli spaces for Artin stacks*, 2008.
- [Alp10] ———, *On the local quotient structure of Artin stacks*, Journal of Pure and Applied Algebra **214** (2010), no. 9, 1576–1591.
- [Alp14] ———, *Adequate moduli spaces and geometrically reductive group schemes*, Algebr. Geom. **1** (2014), no. 4, 489–531.
- [AM69] Michael Artin and Barry Mazur, *Étale homotopy*, Lecture Notes in Mathematics, No. 100, Springer-Verlag, Berlin, 1969.
- [And67] Michel André, *Méthode simpliciale en algèbre homologique et algèbre commutative*, Lecture Notes in Mathematics, Vol. 32, Springer-Verlag, Berlin, 1967.
- [And74] ———, *Homologie des algèbres commutatives*, Springer-Verlag, Berlin, 1974, Die Grundlehren der mathematischen Wissenschaften, Band 206.
- [ANT44] Emil Artin, Cecil James Nesbitt, and Robert McDowell Thrall, *Rings with Minimum Condition*, University of Michigan Publications in Mathematics, no. 1, University of Michigan Press, 1944.

- [Aok06a] Masao Aoki, *Erratum: "Hom stacks"* [*Manuscripta Math.* **119** (2006), no. 1, 37–56; *mr2194377*], *Manuscripta Math.* **121** (2006), no. 1, 135.
- [Aok06b] ———, *Hom stacks*, *Manuscripta Math.* **119** (2006), no. 1, 37–56.
- [AOV08] Dan Abramovich, Martin Christian Olsson, and Angelo Vistoli, *Tame stacks in positive characteristic*, *Annales de l'Institut Fourier* **58** (2008), no. 4, 1057–1091.
- [AR88] Michael Artin and Christel Rotthaus, *A structure theorem for power series rings*, *Algebraic geometry and commutative algebra*, Vol. I, Kinokuniya, Tokyo, 1988, pp. 35–44.
- [Ara01] Alberto Arabia, *Relèvements des algèbres lisses et de leurs morphismes*, *Commentarii Mathematici Helvetici* **76** (2001), no. 4, 607–639.
- [Art62] Michael Artin, *Grothendieck topologies: notes on a seminar*, Harvard University, Dept. of Mathematics, 1962.
- [Art66] ———, *Étale coverings of schemes over hensel rings*, *American Journal of Mathematics* **88** (1966), no. 4, 915–934.
- [Art68] ———, *On the solutions of analytic equations*, *Invent. Math.* **5** (1968), 277–291.
- [Art69a] ———, *Algebraic approximation of structures over complete local rings*, *Inst. Hautes Études Sci. Publ. Math.* (1969), no. 36, 23–58.
- [Art69b] ———, *Algebraization of formal moduli: I*, *Global Analysis (Papers in Honor of K. Kodaira)*, Univ. Tokyo Press, Tokyo, 1969, pp. 21–71.
- [Art69c] ———, *The implicit function theorem in algebraic geometry*, *Algebraic Geometry (Internat. Colloq., Tata Inst. Fund. Res., Bombay, 1968)*, Oxford Univ. Press, London, 1969, pp. 13–34.
- [Art70] ———, *Algebraization of formal moduli: II – existence of modifications*, *Annals of Mathematics* **91** (1970), 88–135.
- [Art71a] ———, *Algebraic spaces*, Yale University Press, New Haven, Conn., 1971, A James K. Whittemore Lecture in Mathematics given at Yale University, 1969, Yale Mathematical Monographs, 3.
- [Art71b] ———, *Construction techniques for algebraic spaces*, *Actes du Congrès International des Mathématiciens (Nice, 1970)*, Tome 1, Gauthier-Villars, Paris, 1971, pp. 419–423.
- [Art73] ———, *Théorèmes de représentabilité pour les espaces algébriques*, *Les Presses de l'Université de Montréal*, Montreal, Que., 1973, En collaboration avec Alexandru Lascu et Jean-François Boutot, *Séminaire de Mathématiques Supérieures*, No. 44 (Été, 1970).
- [Art74] ———, *Versal deformations and algebraic stacks*, *Inventiones Mathematicae* **27** (1974), 165–189.
- [Art82] ———, *Algebraic structure of power series rings*, *Algebraists' homage: papers in ring theory and related topics (New Haven, Conn., 1981)*, *Contemp. Math.*, vol. 13, Amer. Math. Soc., Providence, R.I., 1982, pp. 223–227.
- [Art86] ———, *Lipman's proof of resolution of singularities for surfaces*, *Arithmetic geometry (Storrs, Conn., 1984)*, Springer, New York, 1986, pp. 267–287.
- [Aus55] Maurice Auslander, *On the dimension of modules and algebras. III. Global dimension*, *Nagoya Math. J.* **9** (1955), 67–77.
- [Aus62] ———, *On the purity of the branch locus*, *Amer. J. Math.* **84** (1962), 116–125.
- [AV02] Dan Abramovich and Angelo Vistoli, *Compactifying the space of stable maps*, *Journal of the American Mathematical Society* **15** (2002), no. 1, 27–75.
- [Avr75] Luchezar L. Avramov, *Flat morphisms of complete intersections*, *Dokl. Akad. Nauk SSSR* **225** (1975), no. 1, 11–14.
- [AW71] M. Artin and G. Winters, *Degenerate fibres and stable reduction of curves*, *Topology* **10** (1971), 373–383.
- [AW12] K. Arzdorf and S. Wewers, *Another proof of the semistable reduction theorem*.
- [Bae40] Reinhold Baer, *Abelian groups that are direct summands of every containing abelian group*, *Bull. Amer. Math. Soc.* **46** (1940), 800–806.
- [Bar75] Daniel Barlet, *Espace analytique réduit des cycles analytiques complexes compacts d'un espace analytique complexe de dimension finie*, *Séminaire Norguet, Lecture Notes in Mathematics*, vol. 482, Springer-Verlag, 1975, pp. 1–158.
- [Bas63] Hyman Bass, *Big projective modules are free*, *Illinois J. Math.* **7** (1963), 24–31.

- [BBD82] Alexander A. Beilinson, Joseph Bernstein, and Pierre Deligne, *Faisceaux pervers*, Analysis and topology on singular spaces, I (Luminy, 1981), Astérisque, vol. 100, Soc. Math. France, Paris, 1982, pp. 5–171.
- [BCE⁺07] Kai Behrend, Brian Conrad, Dan Edidin, Barbara Fantechi, William Fulton, Lothar Göttsche, and Andrew Kresch, *Algebraic stacks*, 2007.
- [BCS05] Lev A. Borisov, Linda Chen, and Gregory George Smith, *The orbifold Chow ring of toric Deligne-Mumford stacks*, J. Amer. Math. Soc. **18** (2005), no. 1, 193–215.
- [BD] Alexander Beilinson and Vladimir Drinfeld, *Quantization of hitchin’s integrable system and hecke eigensheaves*, preprint.
- [BD85] Arnaud Beauville and Ron Donagi, *La variété des droites d’une hypersurface cubique de dimension 4*, C.R. Acad. Sc. Paris, Série I **301** (1985), 703–706.
- [BdJ11] Bhargav Bhatt and Aise Johan de Jong, *Crystalline cohomology and de rham cohomology*, 2011.
- [BdJ14] ———, *Lefschetz for local Picard groups*, Ann. Sci. Éc. Norm. Supér. (4) **47** (2014), no. 4, 833–849.
- [BE73] David Alvin Buchsbaum and David Eisenbud, *What makes a complex exact?*, J. Algebra **25** (1973), 259–268.
- [Bed13] Charef Beddani, *Note on the completion of a local domain with geometrically normal formal fibers*, C. R. Math. Acad. Sci. Paris **351** (2013), no. 5-6, 173–175.
- [Beh97] Kai Behrend, *Gromov-Witten invariants in algebraic geometry*, Inventiones Mathematica **127** (1997), 601–617.
- [Beh03a] Roya Beheshti, *Lines on Fano hypersurfaces*, MIT PhD thesis, 2003.
- [Beh03b] Kai A. Behrend, *Derived l -adic categories for algebraic stacks*, Mem. Amer. Math. Soc. **163** (2003), no. 774, viii+93.
- [Beh04a] Kai Behrend, *Cohomology of stacks*, Intersection theory and moduli, ICTP Lect. Notes, XIX, Abdus Salam Int. Cent. Theoret. Phys., Trieste, 2004, pp. 249–294.
- [Beh04b] ———, *Cohomology of stacks*, Intersection theory and moduli, ICTP Lect. Notes, XIX, Abdus Salam Int. Cent. Theoret. Phys., Trieste, 2004, pp. 249–294.
- [Bei78] A. A. Beilinson, *Coherent sheaves on \mathbf{P}^n and problems in linear algebra*, Funktsional. Anal. i Prilozhen. **12** (1978), no. 3, 68–69.
- [Ben73] Bruce Bennett, *On the structure of non-excellent curve singularities in characteristic p* , Inst. Hautes Études Sci. Publ. Math. (1973), no. 42, 129–170.
- [Ber74] Pierre Berthelot, *Cohomologie cristalline des schémas de caractéristique $p > 0$* , Lecture Notes in Mathematics, Vol. 407, Springer-Verlag, Berlin, 1974.
- [Ber90] Vladimir G. Berkovich, *Spectral theory and analytic geometry over non-Archimedean fields*, Mathematical Surveys and Monographs, vol. 33, American Mathematical Society, Providence, RI, 1990.
- [BF97] Kai Behrend and Barbara Fantechi, *The intrinsic normal cone*, Invent. Math. **128** (1997), no. 1, 45–88.
- [BGI71] Pierre Berthelot, Alexander Grothendieck, and Luc Illusie, *Théorie des Intersections et Théorème de Riemann-Roch*, Lecture notes in mathematics, vol. 225, Springer-Verlag, 1971.
- [Bha12] Bhargav Bhatt, *On the non-existence of small Cohen-Macaulay algebras*, 2012.
- [Bha14] ———, *Algebraization and tannaka duality*, 2014, p. 35.
- [Bir68] Joan Birman, *On braid groups*, Comm. Pure Appl. Math. **22** (1968), 41–72.
- [BK89] Alexei. Bondal and Mikhail Kapranov, *Representable functors, serre functors, and reconstructions*, Izv. Akad. Nauk SSSR Ser. Mat. **53** (1989), no. 6, 1183–1205, 1337.
- [Bko70] Rudolphe Bkouché, *Pureté, mollesse et paracompacité*, C. R. Acad. Sci. Paris Sér. A-B **270** (1970).
- [BL95] Arnaud Beauville and Yves Laszlo, *Un lemme de descente*, C. R. Acad. Sci. Paris Sér. I Math. **320** (1995), no. 3, 335–340.
- [BLR90] Siegfried Bosch, Werner Lütkebohmert, and Michel Raynaud, *Néron models*, Ergebnisse der Mathematik und ihrer Grenzgebiete, vol. 21, Springer-Verlag, 1990.
- [BM96] Kai Behrend and Yuri Manin, *Stacks of stable maps and Gromov-Witten invariants*, Duke Math Journal **85** (1996), 1–60.
- [BN93] Marcel Bökstedt and Amnon Neeman, *Homotopy limits in triangulated categories*, Compositio Math. **86** (1993), no. 2, 209–234.

- [BN06] Kai Behrend and Behrang Noohi, *Uniformization of Deligne-Mumford curves*, J. Reine Angew. Math. **599** (2006), 111–153.
- [BO83] Pierre Berthelot and Arthur Ogus, *F-isocrystals and de Rham cohomology. I*, Invent. Math. **72** (1983), no. 2, 159–199.
- [Bor91] Armand Borel, *Linear algebraic groups*, second ed., Graduate Texts in Mathematics, vol. 126, Springer-Verlag, New York, 1991.
- [Bou61] Nicolas Bourbaki, *Éléments de mathématique. Algèbre commutative*, Hermann, Paris, 1961.
- [Bou71] ———, *Éléments de mathématique. Topologie générale. Chapitres 1 à 4*, Hermann, Paris, 1971.
- [Bri68] Egbert Brieskorn, *Rationale Singularitäten komplexer Flächen*, Invent. Math. **4** (1967/1968), 336–358.
- [BS13] Bhargav Bhatt and Peter Scholze, *The pro-étale topology for schemes*, preprint, 2013.
- [Büh10] Theo Bühler, *Exact categories*, Expo. Math. **28** (2010), no. 1, 1–69.
- [BV78] Wolf Barth and Antonius Van de Ven, *Fano-varieties of lines on hypersurfaces*, Arch. Math. **31** (1978), 96–104.
- [BV03] Alexei Bondal and Michel Van den Bergh, *Generators and representability of functors in commutative and noncommutative geometry*, Mosc. Math. J. **3** (2003), no. 1, 1–36.
- [Cad07] Charles Cadman, *Using stacks to impose tangency conditions on curves*, Amer. J. Math. **129** (2007), no. 2, 405–427.
- [Cam91] Frederic Campana, *On the twistor spaces of class C*, J. Diff. Geom. **33** (1991), 541–549.
- [Cam92] ———, *Connexité rationnelle des variétés de Fano*, Ann. Sc. E. N. S. **25** (1992), 539–545.
- [Cas04] Ana-Maria Castravet, *Rational families of vector bundles on curves*, Internat. J. Math. **15** (2004), no. 1, 13–45.
- [CD89] François Cossec and Igor Dolgachev, *Enriques surfaces I*, Progress in Mathematics, vol. 76, Birkhäuser, 1989.
- [CdJ02] Brian Conrad and Aise Johan de Jong, *Approximation of versal deformations*, J. Algebra **255** (2002), no. 2, 489–515.
- [CE56] Henri Cartan and Samuel Eilenberg, *Homological algebra*, Princeton University Press, Princeton, N. J., 1956.
- [CG72] Herbert Clemens Clemens and Phillip Augustus Griffiths, *The intermediate Jacobian of the cubic threefold*, Annals of Mathematics **95** (1972), 281–356.
- [Cha60] Stephen U. Chase, *Direct products of modules*, Trans. Amer. Math. Soc. **97** (1960), 457–473.
- [Che35] Claude Chevalley, *Démonstration d’une hypothèse de M. Artin*, Abh. Math. Sémin. Hamburg. Univ. **11** (1935), 73 – 75.
- [Che44] ———, *Some properties of ideals in rings of power series*, Trans. Amer. Math. Soc. **55** (1944), 68–84.
- [Che58a] ———, *Les classes d’équivalence rationnelles I*, S’eminair Claude Chevalley (1958), 14.
- [Che58b] ———, *Les classes d’équivalence rationnelles II*, S’eminair Claude Chevalley (1958), 18.
- [Cho58] Wei Liang Chow, *On the theorem of Bertini for local domains*, Proc. Nat. Acad. Sci. U.S.A. **44** (1958), 580–584.
- [CK99] David Archibald Cox and Sheldon Katz, *Mirror symmetry and algebraic geometry*, Mathematical Surveys, vol. 68, American Mathematical Society, 1999.
- [Cle72] Alfred Clebsch, *Zur Theorie der Riemann’schen Flächen*, Mathematische Annalen **6** (1872), 216–230.
- [CLO12] Brian Conrad, Max Lieblich, and Martin Olsson, *Nagata compactification for algebraic spaces*, J. Inst. Math. Jussieu **11** (2012), no. 4, 747–814.
- [Con00] Brian Conrad, *Grothendieck duality and base change*, Lecture Notes in Mathematics, vol. 1750, Springer-Verlag, Berlin, 2000.
- [Con05a] ———, *Formal gaga for artin stacks*.
- [Con05b] ———, *Keel-mori theorem via stacks*.
- [Con07a] ———, *Arithmetic moduli of generalized elliptic curves*, J. Inst. Math. Jussieu **6** (2007), no. 2, 209–278.

- [Con07b] ———, *Deligne's notes on Nagata compactifications*, J. Ramanujan Math. Soc. **22** (2007), no. 3, 205–257.
- [Coo88] Kevin Robert Coombes, *Every rational surface is separably split*, Comment. Math. Helv. **63** (1988), 305–311.
- [CP84] Mihai Cipu and Dorin Popescu, *A desingularization theorem of Néron type*, Ann. Univ. Ferrara Sez. VII (N.S.) **30** (1984), 63–76.
- [Cre84] Richard Crew, *Etale p -covers in characteristic p* , Compositio Mathematica **52** (1984), 31–45.
- [CT01] Jean-Louis Colliot-Thélène, *Die Brauersche Gruppe; ihre Verallgemeinerungen und Anwendungen in der Arithmetischen Geometrie*, preprint, 2001.
- [Deb01] Olivier Debarre, *Higher-dimensional algebraic geometry*, Universitext, Springer-Verlag, 2001.
- [Deb03] ———, *Variétés rationnellement connexes (d'après T. Graber, J. Harris, J. Starr et A. J. de Jong)*, Astérisque (2003), no. 290, 243–266, Séminaire Bourbaki. Vol. 2001/2002.
- [Del71] Pierre Deligne, *Théorie de Hodge. II*, Inst. Hautes Études Sci. Publ. Math. (1971), no. 40, 5–57.
- [Del74a] ———, *La conjecture de Weil. I*, Inst. Hautes Études Sci. Publ. Math. (1974), no. 43, 273–307.
- [Del74b] ———, *Théorie de Hodge. III*, Inst. Hautes Études Sci. Publ. Math. (1974), no. 44, 5–77.
- [Del77] ———, *Cohomologie étale*, Lecture Notes in Mathematics, no. 569, Springer-Verlag, 1977.
- [Del80] ———, *La conjecture de Weil. II*, Inst. Hautes Études Sci. Publ. Math. (1980), no. 52, 137–252.
- [Deu68] Max Deuring, *Algebren*, Ergebnisse der Mathematik und ihrer Grenzgebiete, Springer-Verlag, Berlin, 1968.
- [DG67] Jean Dieudonné and Alexander Grothendieck, *Éléments de géométrie algébrique*, Inst. Hautes Études Sci. Publ. Math. **4**, **8**, **11**, **17**, **20**, **24**, **28**, **32** (1961–1967).
- [DG02] William G. Dwyer and John Patrick Campbell Greenlees, *Complete modules and torsion modules*, Amer. J. Math. **124** (2002), no. 1, 199–220.
- [dJ95] Aise Johan de Jong, *Crystalline Dieudonné module theory via formal and rigid geometry*, Inst. Hautes Études Sci. Publ. Math. (1995), no. 82, 5–96.
- [dJ96] A. J. de Jong, *Smoothness, semi-stability and alterations*, Inst. Hautes Études Sci. Publ. Math. (1996), no. 83, 51–93.
- [dJ97] A. Johan de Jong, *Families of curves and alterations*, Ann. Inst. Fourier (Grenoble) **47** (1997), no. 2, 599–621.
- [dJ01] Aise Johan de Jong, *A conjecture on arithmetic fundamental groups*, Israel J. Math. **121** (2001), 61–84.
- [dJ04] ———, *The period-index problem for the Brauer group of an algebraic surface*, Duke Math. J. **123** (2004), 71–94.
- [dJHS11] A. J. de Jong, Xuhua He, and Jason Michael Starr, *Families of rationally simply connected varieties over surfaces and torsors for semisimple groups*, Publ. Math. Inst. Hautes Études Sci. (2011), no. 114, 1–85.
- [dJS03] Aise Johan de Jong and Jason Starr, *Every rationally connected variety over the function field of a curve has a rational point*, Amer. J. Math. **125** (2003), 567–580.
- [dJS04] ———, *Cubic fourfolds and spaces of rational curves*, Illinois J. Math. **48** (2004), 415–450.
- [dJS05] ———, *Divisor classes and the virtual canonical bundle*, preprint, 2005.
- [DK73] Pierre Deligne and Nicholas Katz, *Groupes de monodromie en géométrie algébrique. II*, Lecture Notes in Mathematics, Vol 340, Springer-Verlag, 1973, Séminaire de Géométrie Algébrique du Bois-Marie 1967–1969 (SGA 7, II).
- [DM69] Pierre Deligne and David Mumford, *The irreducibility of the space of curves of given genus*, Publ. Math. IHES **36** (1969), 75–110.
- [DM83] Guiseppe De Marco, *Projectivity of pure ideals*, Rend. Sem. Mat. Univ. Padova **69** (1983), 289–304.
- [DRGV92] José Luís Doncel, Alfredo Rodríguez-Grandjeán, and Maria Jesús Vale, *On the homology of commutative algebras*, J. Pure Appl. Algebra **79** (1992), no. 2, 131–157.

- [Dri80] Vladimir Gershonovich Drinfel'd, *Langlands' conjecture for $GL(2)$ over functional fields*, Proceedings of the International Congress of Mathematicians (Helsinki, 1978) (Helsinki), Acad. Sci. Fennica, 1980, pp. 565–574.
- [Dri83] ———, *Two-dimensional l -adic representations of the fundamental group of a curve over a finite field and automorphic forms on $GL(2)$* , Amer. J. Math. **105** (1983), no. 1, 85–114.
- [Dri84] ———, *Two-dimensional l -adic representations of the Galois group of a global field of characteristic p and automorphic forms on $GL(2)$* , Zap. Nauchn. Sem. Leningrad. Otdel. Mat. Inst. Steklov. (LOMI) **134** (1984), 138–156, Automorphic functions and number theory, II.
- [Dum00] Tiberiu Dumitrescu, *On some examples of atomic domains and of G -rings*, Comm. Algebra **28** (2000), no. 3, 1115–1123.
- [Eak68] Paul Meclin Eakin, Jr., *The converse to a well known theorem on Noetherian rings*, Math. Ann. **177** (1968), 278–282.
- [Edi00] Dan Edidin, *Notes on the construction of the moduli space of curves*, Recent progress in intersection theory (Bologna, 1997), Trends Math., Birkhäuser Boston, Boston, MA, 2000, pp. 85–113.
- [Edi03] ———, *What is a stack?*, Notices Amer. Math. Soc. **50** (2003), no. 4, 458–459.
- [EG98] Dan Edidin and William Graham, *Equivariant intersection theory*, Invent. Math. **131** (1998), no. 3, 595–634.
- [EG15] Matthew Emerton and Toby Gee, *“scheme-theoretic images” of morphisms of stacks*.
- [EG17] ———, *Dimension theory and components of algebraic stacks*.
- [EH05] David Eisenbud and Craig Huneke, *A finiteness property of infinite resolutions*, J. Pure Appl. Algebra **201** (2005), no. 1-3, 284–294.
- [EHKV01] Dan Edidin, Brendan Hassett, Andrew Kresch, and Angelo Vistoli, *Brauer groups and quotient stacks*, Amer. J. Math. **123** (2001), no. 4, 761–777.
- [Eis95] David Eisenbud, *Commutative algebra*, Graduate Texts in Mathematics, vol. 150, Springer-Verlag, 1995.
- [Eke90] Torsten Ekedahl, *On the adic formalism*, 197–218.
- [Elk73] Renée Elkik, *Solutions d'équations à coefficients dans un anneau hensélien*, Ann. Sci. École Norm. Sup. (4) **6** (1973), 553–603.
- [EM45] Samuel Eilenberg and Saunders Mac Lane, *General theory of natural equivalences*, Transactions of the American Mathematical Society **58** (1945), 231–294.
- [EM04] Lawrence Ein and Mircea Mustață, *Inversion of adjunction for local complete intersection varieties*, Amer. J. Math. **126** (2004), no. 6, 1355–1365.
- [Emm96] Ioannis Emmanouil, *Mittag-Leffler condition and the vanishing of \varprojlim^1* , Topology **35** (1996), no. 1, 267–271.
- [EMY03] Lawrence Ein, Mircea Mustață, and Takehiko Yasuda, *Jet schemes, log discrepancies and inversion of adjunction*, Invent. Math. **153** (2003), no. 3, 519–535.
- [Eng77] Ryszard Engelking, *General topology*, Taylor & Francis, 1977.
- [Epp73] Helmut P. Epp, *Eliminating wild ramification*, Invent. Math. **19** (1973), 235–249.
- [ES52] Samuel Eilenberg and Norman Steenrod, *Foundations of algebraic topology*, Princeton University Press, Princeton, New Jersey, 1952.
- [Esn03] Hélène Esnault, *Varieties over a finite field with trivial Chow group of 0-cycles have a rational point*, Invent. Math. **151** (2003), no. 1, 187–191.
- [EZ53] Samuel Eilenberg and Joseph Abraham Zilber, *On products of complexes*, Amer. J. Math. **75** (1953), 200–204.
- [Fal78a] Gerd Faltings, *Ein einfacher Beweis, dass geometrische Regularität formale Glattheit impliziert*, Arch. Math. (Basel) **30** (1978), no. 3, 284–285.
- [Fal78b] ———, *Über die Annulatoren lokaler Kohomologiegruppen*, Arch. Math. (Basel) **30** (1978), no. 5, 473–476.
- [Fal78c] ———, *über Macaulayfizierung*, Math. Ann. **238** (1978), no. 2, 175–192.
- [Fal78d] ———, *Zur Existenz dualisierender Komplexe*, Math. Z. **162** (1978), no. 1, 75–86.
- [Fal79a] ———, *Algebraisation of some formal vector bundles*, Ann. of Math. (2) **110** (1979), no. 3, 501–514.
- [Fal79b] ———, *Ergänzungen zu einem Artikel über dualisierende Komplexe*, Arch. Math. (Basel) **32** (1979), no. 1, 31–33.

- [Fal80a] ———, *A contribution to the theory of formal meromorphic functions*, Nagoya Math. J. **77** (1980), 99–106.
- [Fal80b] ———, *Some theorems about formal functions*, Publ. Res. Inst. Math. Sci. **16** (1980), no. 3, 721–737.
- [Fal80c] ———, *über lokale Kohomologiegruppen hoher Ordnung*, J. Reine Angew. Math. **313** (1980), 43–51.
- [Fal81a] ———, *Der Endlichkeitssatz in der lokalen Kohomologie*, Math. Ann. **255** (1981), no. 1, 45–56.
- [Fal81b] ———, *Ein Kriterium für vollständige Durchschnitte*, Invent. Math. **62** (1981), no. 3, 393–401.
- [Fal93] ———, *Stable G-bundles and projective connections*, J. Algebraic Geom. **2** (1993), no. 3, 507–568.
- [Fal99] ———, *Integral crystalline cohomology over very ramified valuation rings*, J. Amer. Math. Soc. **12** (1999), no. 1, 117–144.
- [Fal03] ———, *Finiteness of coherent cohomology for proper fppf stacks*, J. Algebraic Geom. **12** (2003), no. 2, 357–366.
- [Fan01] Barbara Fantechi, *Stacks for everybody*, European Congress of Mathematics, Vol. I (Barcelona, 2000), Progr. Math., vol. 201, Birkhäuser, Basel, 2001, pp. 349–359.
- [FDL]
- [Fer67] Daniel Ferrand, *Épimorphismes d’anneaux et algèbres séparables*, C. R. Acad. Sci. Paris Sér. A-B **265** (1967), A411–A414.
- [Fer69] ———, *Descente de la platitude par un homomorphisme fini*, C. R. Acad. Sci. Paris Sér. A-B **269** (1969).
- [Fer03] ———, *Conducteur, descente et pincement*, Bull. Soc. Math. France **131** (2003), no. 4, 553–585.
- [FH91] William Fulton and Joe Harris, *Representation theory, a first course*, Graduate Texts in Mathematics, vol. 129, Springer-Verlag, 1991.
- [FK] Kazuhiro Fujiwara and Fumiharu Kato, *Foundations of rigid geometry i*.
- [Fle81] Hubert Flenner, *Ein Kriterium für die Offenheit der Versalität*, Math. Z. **178** (1981), no. 4, 449–473.
- [FM81] William Fulton and Robert MacPherson, *Categorical framework for the study of singular spaces*, Mem. Amer. Math. Soc. **31** (1981), no. 243, vi+165.
- [FMN07] Barbara Fantechi, Etienne Mann, and Fabio Nironi, *Smooth toric dm stacks*, math.AG/0708.1254 (2007).
- [FO10] William Fulton and Martin Christian Olsson, *The Picard group of $\mathcal{M}_{1,1}$* , Algebra and Number Theory **4** (2010), no. 1, 87–104.
- [For91] Otto Forster, *Lectures on Riemann surfaces*, Graduate Texts in Mathematics, vol. 81, Springer-Verlag, New York, 1991, Translated from the 1977 German original by Bruce Gilligan, Reprint of the 1981 English translation.
- [FP95] William Fulton and Rahul Pandharipande, *Notes on stable maps and quantum cohomology*, Algebraic geometry – Santa Cruz 1995, American Mathematical Society, 1995, pp. 45–96.
- [FP02] Barbara Fantechi and Rahul Pandharipande, *Stable maps and branch divisors*, Compositio Math. **130** (2002), no. 3, 345–364.
- [FR70] Daniel Ferrand and Michel Raynaud, *Fibres formelles d’un anneau local noethérien*, Ann. Sci. École Norm. Sup. (4) **3** (1970), 295–311.
- [Fre64] Peter Freyd, *Abelian categories. An introduction to the theory of functors*, Harper’s Series in Modern Mathematics, Harper & Row Publishers, New York, 1964.
- [Ful69] William Fulton, *Hurwitz schemes and moduli of curves*, Annals of Mathematics **90** (1969), 542–575.
- [Ful98] ———, *Intersection theory*, 2 ed., Ergebnisse der Mathematik und ihrer Grenzgebiete, 3. Folge, vol. 2, Springer-Verlag, 1998.
- [Gab94] Ofer Gabber, *Affine analog of the proper base change theorem*, Israel J. Math. **87** (1994), no. 1-3, 325–335.
- [Gab96] ———, *A property of nonexcellent rings*, Manuscripta Math. **91** (1996), no. 4, 543–546.
- [Gai07] Dennis Gaitsgory, *On de Jong’s conjecture*, Israel J. Math. **157** (2007), 155–191.

- [GD60] Alexander Grothendieck and Jean Dieudonné, *Éléments de géométrie algébrique I*, Publications Mathématiques, vol. 4, Institute des Hautes Études Scientifiques., 1960.
- [GD61] ———, *Éléments de géométrie algébrique II*, Publications Mathématiques, vol. 8, Institute des Hautes Études Scientifiques., 1961.
- [GD63] ———, *Éléments de géométrie algébrique III*, Publications Mathématiques, vol. 11, 17, Institute des Hautes Études Scientifiques., 1961–1963.
- [GD67] ———, *Éléments de géométrie algébrique IV*, Publications Mathématiques, vol. 20, 24, 28, 32, Institute des Hautes Études Scientifiques., 1964–1967.
- [GD71] ———, *Éléments de géométrie algébrique I*, Grundlehren der Mathematischen Wissenschaften, vol. 166, Springer-Verlag, 1971.
- [GE00] Lothar Göttsche and Geir Ellingsrud, *Hilbert schemes of points and Heisenberg algebras*, School on Algebraic Geometry (Trieste, 1999), Abdus Salam Int. Cent. Theoret. Phys., 2000, pp. 59–100.
- [GH78] Phillip August Griffiths and Joseph Harris, *Principles of algebraic geometry*, Pure and Applied Mathematics, John Wiley and Sons, 1978.
- [GHMS02] Tom Graber, Joe Harris, Barry Mazur, and Jason Starr, *Rational connectivity and sections of families over curves*, submitted Ann. Sci. Ecole Norm. Sup., 2002.
- [GHMS04a] ———, *Arithmetic questions related to rationally connected varieties*, The legacy of Niels Henrik Abel, The Abel Bicentennial, Oslo 2002, Springer-Verlag, Berlin, 2004, pp. 531–542.
- [GHMS04b] Tom Graber, Joseph Harris, Barry Mazur, and Jason Starr, *Jumps in Mordell-Weil rank and arithmetic surjectivity*, Arithmetic of higher-dimensional algebraic varieties (Palo Alto, CA, 2002), Progr. Math., vol. 226, Birkhäuser Boston, Boston, MA, 2004, pp. 141–147.
- [GHS02] Tom Graber, Joe Harris, and Jason Starr, *A note on Hurwitz schemes of covers of a positive genus curve*, preprint, 2002.
- [GHS03] ———, *Families of rationally connected varieties*, J. Amer. Math. Soc. **16** (2003), 57–67.
- [Gie82] D. Gieseker, *Lectures on moduli of curves*, Tata Institute of Fundamental Research Lectures on Mathematics and Physics, vol. 69, Published for the Tata Institute of Fundamental Research, Bombay; Springer-Verlag, Berlin-New York, 1982.
- [Gir65] Jean Giraud, *Cohomologie non abélienne*, C. R. Acad. Sci. Paris **260** (1965), 2666–2668.
- [GJ99] Paul Gregory Goerss and John Frederick Jardine, *Simplicial homotopy theory*, Progress in Mathematics, vol. 174, Birkhäuser Verlag, Basel, 1999.
- [GKM02] Angela Gibney, Sean Keel, and Ian Morrison, *Towards the ample cone of moduli spaces of stable curves*, J. Amer. Math. Soc. **15** (2002), 273–294.
- [GL01] T. G. Goodwillie and S. Lichtenbaum, *A cohomological bound for the h-topology*, Amer. J. Math. **123** (2001), no. 3, 425–443.
- [Gle58] Andrew Mattei Gleason, *Projective topological spaces*, Illinois J. Math. **2** (1958), 482–489.
- [GM71] Alexander Grothendieck and Jacob P. Murre, *The tame fundamental group of a formal neighbourhood of a divisor with normal crossings on a scheme*, Lecture Notes in Mathematics, Vol. 208, Springer-Verlag, Berlin-New York, 1971.
- [GM88] Mark Goresky and Robert MacPherson, *Stratified Morse theory*, Ergebnisse der Mathematik, vol. 14, Springer-Verlag, 1988.
- [GM92] John Patrick Campbell Greenlees and Jon Peter May, *Derived functors of I-adic completion and local homology*, J. Algebra **149** (1992), no. 2, 438–453.
- [God73] Roger Godement, *Topologie algébrique et théorie des faisceaux*, Hermann, Paris, 1973, Troisième édition revue et corrigée, Publications de l’Institut de Mathématique de l’Université de Strasbourg, XIII, Actualités Scientifiques et Industrielles, No. 1252.
- [GR71] Laurent Gruson and Michel Raynaud, *Critères de platitude et de projectivité*, Invent. math. **13** (1971), 1–89.
- [GR13] Dennis Gaitsgory and Nick Rozenblyum, *Dg indschemes*, 2013.
- [Gra65] John W. Gray, *Sheaves with values in a category*, Topology **3** (1965), 1–18.
- [Gre76] Silvio Greco, *Two theorems on excellent rings*, Nagoya Math. J. **60** (1976), 139–149.
- [Gri68] Phillip August Griffiths, *Periods of integrals on algebraic manifolds, II*, American Journal of Mathematics **90** (1968), 805–865.

- [Gri69] ———, *On the periods of certain rational integrals, I*, Annals of Mathematics **90** (1969), 496–541.
- [Gri84] ———, *Variations of Hodge structure*, Topics in Transcendental Algebraic Geometry, Annals of Mathematics Studies, vol. 106, Annals of Mathematics, 1984.
- [Gro57] Alexander Grothendieck, *Sur quelques points d’algèbre homologique*, Tohoku Mathematical Journal **9** (1957), 119–221.
- [Gro62] ———, *Fondements de la géométrie algébrique*, Secrétariat mathématique, 1962.
- [Gro68] ———, *Cohomologie locale des faisceaux cohérents et théorèmes de Lefschetz locaux et globaux (SGA 2)*, Advanced Studies in Pure Mathematics, vol. 2, North-Holland Publishing Co., 1968, Augmenté d’un exposé par Michèle Raynaud, Séminaire de Géométrie Algébrique du Bois-Marie, 1962.
- [Gro71] ———, *Revêtements étales et groupe fondamental (sga 1)*, Lecture notes in mathematics, vol. 224, Springer-Verlag, 1971.
- [Gro77] Alexandre Grothendieck, *Séminaire de géométrie algébrique du bois-marie 1965-66, cohomologie l-adique et fonctions l*, sga5, Springer Lecture Notes, vol. 589, Springer-Verlag, 1977.
- [Gro95a] Alexander Grothendieck, *Technique de descente et théorèmes d’existence en géométrie algébrique. I. Généralités. Descente par morphismes fidèlement plats*, Séminaire Bourbaki, Vol. 5, Soc. Math. France, Paris, 1995, pp. 299–327.
- [Gro95b] ———, *Technique de descente et théorèmes d’existence en géométrie algébrique. II. Le théorème d’existence en théorie formelle des modules*, Séminaire Bourbaki, Vol. 5, Soc. Math. France, Paris, 1995, pp. 369–390.
- [Gro95c] ———, *Technique de descente et théorèmes d’existence en géométrie algébrique. V. Les schémas de Picard: théorèmes d’existence*, Séminaire Bourbaki, Vol. 7, Soc. Math. France, Paris, 1995, pp. 143–161.
- [Gro95d] ———, *Technique de descente et théorèmes d’existence en géométrie algébrique. VI. Les schémas de Picard: propriétés générales*, Séminaire Bourbaki, Vol. 7, Soc. Math. France, Paris, 1995, pp. 221–243.
- [Gro95e] ———, *Techniques de construction et théorèmes d’existence en géométrie algébrique. III. Préschémas quotients*, Séminaire Bourbaki, Vol. 6, Soc. Math. France, Paris, 1995, pp. 99–118.
- [Gro95f] ———, *Techniques de construction et théorèmes d’existence en géométrie algébrique. IV. Les schémas de Hilbert*, Séminaire Bourbaki, Vol. 6, Soc. Math. France, Paris, 1995, pp. 249–276.
- [GRR72] Alexander Grothendieck, Michel Raynaud, and Dock Sang Rim, *Groupes de monodromie en géométrie algébrique. I*, Lecture Notes in Mathematics, Vol. 288, Springer-Verlag, 1972, Séminaire de Géométrie Algébrique du Bois-Marie 1967–1969 (SGA 7 I).
- [Gru73] Laurent Gruson, *Dimension homologique des modules plats sur un anneau commutatif noethérien*, Symposia Mathematica, Vol. XI (Convegno di Algebra Commutativa, INDAM, Rome, 1971), Academic Press, London, 1973, pp. 243–254.
- [GS81] Silvio Greco and Rosario Strano, *Quasicoherent sheaves over affine Hensel schemes*, Trans. Amer. Math. Soc. **268** (1981), no. 2, 445–465.
- [GS01] Alexandre Grothendieck and Jean-Pierre Serre, *Correspondance grothendieck-serre*, Société Math. de France, 2001.
- [GS11a] Anton Geraschenko and Matthew Satriano, *Toric stacks I: The theory of stacky fans*.
- [GS11b] ———, *Toric stacks II: Intrinsic characterization of toric stacks*.
- [GZ67] Pierre Gabriel and Michel Zisman, *Calculus of fractions and homotopy theory*, Ergebnisse der Mathematik und ihrer Grenzgebiete, Band 35, Springer-Verlag New York, Inc., New York, 1967.
- [Hal17] Jack Hall, *Openness of versality via coherent functors*, J. Reine Angew. Math. **722** (2017), 137–182.
- [Har62] Robin Hartshorne, *Complete intersections and connectedness*, Amer. J. Math. **84** (1962), 497–508.
- [Har66] ———, *Residues and duality, lecture notes of a seminar on the work of a grothendieck*, Lecture Notes in Math., vol. 20, Springer-Verlag, 1966.
- [Har68] ———, *Cohomological dimension of algebraic varieties*, Ann. of Math. (2) **88** (1968), 403–450.

- [Har77] ———, *Algebraic geometry*, Graduate Texts in Mathematics, vol. 52, Springer-Verlag, 1977.
- [Har98] ———, *Coherent functors*, Adv. Math. **140** (1998), no. 1, 44–94.
- [Has99] Brendan Hassett, *Some rational cubic fourfolds*, Journal of Algebraic Geometry **8** (1999), 103–114.
- [Has00] ———, *Special cubic fourfolds*, Compositio Mathematica **120** (2000), 1–23.
- [Has03] ———, *Moduli spaces of weighted pointed stable curves*, Adv. Math. **173** (2003), no. 2, 316–352.
- [Hei82] Raymond C. Heitmann, *A noncatenary, normal, local domain*, Rocky Mountain J. Math. **12** (1982), no. 1, 145–148.
- [Hei93] ———, *Characterization of completions of unique factorization domains*, Trans. Amer. Math. Soc. **337** (1993), no. 1, 379–387.
- [Hei94] ———, *Completions of local rings with an isolated singularity*, J. Algebra **163** (1994), no. 2, 538–567.
- [HH92] Melvin Hochster and Craig Huneke, *Infinite integral extensions and big Cohen-Macaulay algebras*, Ann. of Math. (2) **135** (1992), no. 1, 53–89.
- [Hir64] Heisuke Hironaka, *Resolution of singularities of an algebraic variety over a field of characteristic zero. I, II*, Annals of Mathematics **79** (1964), 109–326.
- [Hir95] Friedrich Hirzebruch, *Topological methods in algebraic geometry*, Classics in Mathematics, Springer-Verlag, Berlin, 1995.
- [HL97] Daniel Huybrechts and Manfred Lehn, *The geometry of moduli spaces of sheaves*, Aspects of Mathematics, E31, Friedr. Vieweg & Sohn, Braunschweig, 1997.
- [HL07] William J. Heinzer and Lawrence S. Levy, *Domains of dimension 1 with infinitely many singular maximal ideals*, Rocky Mountain J. Math. **37** (2007), no. 1, 203–214.
- [HLP14] Daniel Halpern-Leistner and Anatoly Preygel, *Mapping stacks and categorical notions of properness*, 2014.
- [HM82] Joe Harris and David Mumford, *On the Kodaira dimension of the moduli space of curves*, Invent. Math. **67** (1982), 23–86.
- [HM98] Joe Harris and Ian Morrison, *Moduli of curves*, Graduate Texts in Mathematics, vol. 187, Springer-Verlag, 1998.
- [HMP98] Joe Harris, Barry Mazur, and Rahul Pandharipande, *Hypersurfaces of low degree*, Duke Math. J. **95** (1998), 125–160.
- [Hoc67] Melvin Hochster, *PRIME IDEAL STRUCTURE IN COMMUTATIVE RINGS*, ProQuest LLC, Ann Arbor, MI, 1967, Thesis (Ph.D.)—Princeton University.
- [Hoc69] ———, *Prime ideal structure in commutative rings*, Trans. Amer. Math. Soc. **142** (1969), 43–60.
- [Hoc73] M. Hochster, *Non-openness of loci in Noetherian rings*, Duke Math. J. **40** (1973), 215–219.
- [Hol08] Sharon Hollander, *A homotopy theory for stacks*, Israel Journal of Mathematics **163** (2008), 93–124.
- [Hoo72] Raymond Taylor Hoobler, *Cohomology in the finite topology and Brauer groups*, Pacific J. Math. **42** (1972), 667–679.
- [Hoo82] ———, *When is $\text{Br}(X) = \text{Br}'(X)$?*, Brauer groups in ring theory and algebraic geometry (Wilrijk, 1981), Lecture Notes in Math., vol. 917, Springer, Berlin, 1982, pp. 231–244.
- [HR10] Jack Hall and David Rydh, *The hilbert stack*.
- [HR12] ———, *Artin's criteria for algebraicity revisited*.
- [HR13] ———, *General hilbert stacks and quot schemes*.
- [HRS02a] Joe Harris, Mike Roth, and Jason Starr, *Abel-Jacobi maps associated to smooth cubic threefolds*, submitted Journal of Alg. Geom., 2002.
- [HRS02b] Joseph Harris, Mike Roth, and Jason Starr, *Curves of small degree on cubic threefolds*, to appear in Rocky Mountain Journal of Math., 2002.
- [HRS04] Joe Harris, Mike Roth, and Jason Starr, *Rational curves on hypersurfaces of low degree*, J. Reine Angew. Math. **571** (2004), 73–106.
- [HRW04] William Heinzer, Christel Rotthaus, and Sylvia Wiegand, *Catenary local rings with geometrically normal formal fibers*, Algebra, arithmetic and geometry with applications (West Lafayette, IN, 2000), Springer, Berlin, 2004, pp. 497–510.

- [HS] Joseph Harris and Jason Starr, *Rational curves on blow-ups of projective space*, in preparation.
- [HS05] Joe Harris and Jason Starr, *Rational curves on hypersurfaces of low degree. II*, *Compos. Math.* **141** (2005), no. 1, 35–92.
- [HT00] Joe Harris and Yuri Tschinkel, *Rational points on quartics*, *Duke Math. J.* **104** (2000), 477–500.
- [HT03] Brendan Hassett and Yuri Tschinkel, *Integral points and effective cones of moduli spaces of stable maps*, *Duke Math. J.* **120** (2003), no. 3, 577–599.
- [Hub93a] Roland Huber, *Continuous valuations*, *Math. Z.* **212** (1993), no. 3, 455–477.
- [Hub93b] ———, *Étale cohomology of Henselian rings and cohomology of abstract Riemann surfaces of fields*, *Math. Ann.* **295** (1993), no. 4, 703–708.
- [Hur91] Adolf Hurwitz, *Ueber Riemann'sche Flächen mit gegebenen Verzweigungspunkten*, *Mathematische Annalen* **39** (1891), 1–61.
- [Iha83] Yasutaka Ihara, *How many primes decompose completely in an infinite unramified Galois extension of a global field?*, *J. Math. Soc. Japan* **35** (1983), no. 4, 693–709.
- [Iit82] Shigeru Iitaka, *Algebraic geometry. An introduction to birational geometry of algebraic varieties*, *Graduate Texts in Mathematics*, vol. 76, Springer-Verlag, 1982.
- [IK00] Ivan Ivan Kausz, *A modular compactification of the general linear group*, *Doc. math.* **5** (2000), 553–594.
- [Ill72] Luc Illusie, *Complexe cotangent et déformations I and II*, *Lecture Notes in Mathematics*, Vol. 239 and 283, Springer-Verlag, Berlin, 1971/1972.
- [ILO14] Luc Illusie, Yves Laszlo, and Frabice Orgogozo, *Travaux de gabber sur l'uniformisation locale et la cohomologie étale des schémas quasi-excellents*, *Astérisque* 363-364, Publications de la SMF, 2014.
- [IM00] Atanas Iliev and Dimitri Markushevich, *The Abel-Jacobi map for a cubic threefold and periods of Fano threefolds of degree 14*, *Documenta Mathematica* **5** (2000), 23–47.
- [IN99] Yukari Ito and Iku Nakamura, *Hilbert schemes and simple singularities*, *New trends in algebraic geometry* (Warwick, 1996), *London Math. Soc. Lecture Notes Ser.*, vol. 264, Cambridge Univ. Press, 1999, pp. 151–233.
- [Ive86] Birger Iversen, *Cohomology of sheaves*, *Universitext*, Springer-Verlag, Berlin, 1986.
- [Iwa07] Isamu Iwanari, *Integral chow rings of toric stacks*, *math.AG/0705.3524* (2007).
- [Iwa09] ———, *The category of toric stacks*, *Compos. Math.* **145** (2009), no. 3, 718–746.
- [Jac64] Nathan Jacobson, *Lectures in abstract algebra. Vol III: Theory of fields and Galois theory*, D. Van Nostrand Co., Inc., Princeton, N.J.-Toronto, Ont.-London-New York, 1964.
- [Jac75a] ———, *Lectures in abstract algebra*, Springer-Verlag, New York, 1975, Volume II: Linear algebra, Reprint of the 1953 edition [Van Nostrand, Toronto, Ont.], *Graduate Texts in Mathematics*, No. 31.
- [Jac75b] ———, *Lectures in abstract algebra. Vol. I*, Springer-Verlag, New York, 1975, Basic concepts, Reprint of the 1951 edition, *Graduate Texts in Mathematics*, No. 30.
- [Jaf97] David Benjamin Jaffe, *Coherent functors, with application to torsion in the picard group*, *Trans. Amer. Math. Soc.* **349** (1997), no. 2, 481–527.
- [Jan88] Uwe Jannsen, *Continuous étale cohomology*, *Math. Ann.* **280** (1988), 207–245.
- [Jec02] Thomas Jech, *Set theory*, *Springer Monographs in mathematics*, Springer, 2002.
- [Jou83] Jean-Pierre Jouanolou, *Théorèmes de Bertini et applications*, *Progress in Mathematics*, vol. 42, Birkhäuser, 1983.
- [Joy96] Pierre Joyet, *Poulebèques de modules quasi-cohérents*, *Comm. Algebra* **24** (1996), no. 3, 1035–1049.
- [JT84] André Joyal and Myles Tierney, *An extension of the Galois theory of Grothendieck*, *Mem. Amer. Math. Soc.* **51** (1984), no. 309, vii+71.
- [JT04] G. Janelidze and W. Tholen, *Facets of descent III: Monadic descent for rings and algebras*, *Appl. Categorical Structures* (2004), no. 12, 461–477.
- [K⁺93] János Kollár et al., *Flips and abundance for algebraic threefolds*, *Astérisque*, vol. 211, Soc. Math. de France, 1993.
- [Kab71] Thomas Kabele, *Regularity conditions in nonnoetherian rings*, *Trans. Amer. Math. Soc.* **155** (1971), 363–374.

- [Kan04] Vassil Kanev, *Irreducibility of Hurwitz spaces*, Preprint N. 241, Feb. 2004, Dipartimento di Math., Univ. di Palermo., 2004.
- [Kap58] Irving Kaplansky, *Projective modules*, Ann. of Math (2) **68** (1958), 372–377.
- [Kap93] Mikhail M. Kapranov, *Veronese curves and Grothendieck-Knudsen moduli space $\overline{M}_{0,n}$* , J. Algebraic Geom. **2** (1993), no. 2, 239–262.
- [Kat86] Kazuya Kato, *Milnor K-theory and the Chow group of zero cycles*, 241–253.
- [Kaw83] Yujiro Kawamata, *Kodaira dimension of certain algebraic fiber spaces*, J. Fac. Sci. Univ. Tokyo Sect. IA Math. **1** (1983), 1–24.
- [Kaw97] ———, *Subadjunction of log canonical divisors for a subvariety of codimension 2*, Birational algebraic geometry (Baltimore, MD, 1996), Contemp. Math., vol. 207, Amer. Math. Soc., Providence, RI, 1997, pp. 79–88.
- [Kaw02] Takesi Kawasaki, *On arithmetic Macaulayfication of Noetherian rings*, Trans. Amer. Math. Soc. **354** (2002), no. 1, 123–149 (electronic).
- [Kee92] Sean Keel, *Intersection theory of moduli space of stable n -pointed curves of genus zero*, Trans. Amer. Math. Soc. **330** (1992), no. 2, 545–574.
- [Kel90] Bernhard Keller, *Chain complexes and stable categories*, Manuscripta Math. **67** (1990), no. 4, 379–417.
- [Kel94] ———, *Deriving DG categories*, Ann. Sci. École Norm. Sup. (4) **27** (1994), no. 1, 63–102.
- [Kel06] ———, *On differential graded categories*, International Congress of Mathematicians. Vol. II, Eur. Math. Soc., Zürich, 2006, pp. 151–190.
- [Kem92] George Rushing Kempf, *Pulling back bundles*, Pacific J. Math. **152** (1992), no. 2, 319–322.
- [Kie72] Reinhardt Kiehl, *Ein “Descente”-Lemma und Grothendiecks Projektionssatz für nichtnoethersche Schemata*, Math. Ann. **198** (1972), 287–316.
- [KL15] Kiran Kedlaya and Ruochuan Liu, *Relative p -adic hodge theory, i: Foundations*, Astérisque, vol. 371, 2015.
- [Kle79] Steven Lawrence Kleiman, *Misconceptions about K_X* , Enseign. Math. (2) **25** (1979), no. 3-4, 203–206.
- [Kle98] Steven L. Kleiman, *Bertini and his two fundamental theorems*, Rend. Circ. Mat. Palermo (2) Suppl. (1998), no. 55, 9–37, Studies in the history of modern mathematics, III.
- [Kle05] ———, *The Picard scheme*, Fundamental algebraic geometry, Math. Surveys Monogr., vol. 123, Amer. Math. Soc., Providence, RI, 2005, pp. 235–321.
- [Klu88] Paul Kluitmann, *Hurwitz actions and finite quotients of braid groups*, Braids (Santa Cruz, CA, 1986), American Mathematical Society, 1988, pp. 299–325.
- [KM76] Finn Faye Knudsen and David Mumford, *The projectivity of the moduli space of stable curves, I. Preliminaries on “det” and “Div”*, Math. Scand. **39** (1976), no. 1, 19–55.
- [KM85] Nicholas Michael Katz and Barry Mazur, *Arithmetic moduli of elliptic curves*, Annals of Mathematics Studies, vol. 108, Princeton University Press, Princeton, NJ, 1985.
- [KM96] Sean Keel and James McKernan, *Contractible extremal rays on $\overline{M}_{0,n}$* , preprint, 1996.
- [KM97] Sean Keel and Shigefumi Mori, *Quotients by groupoids*, Ann. of Math. (2) **145** (1997), 193–213.
- [KM98] János Kollár and Shigefumi Mori, *Birational geometry of algebraic varieties*, Cambridge Tracts in Mathematics, vol. 134, Cambridge University Press, 1998.
- [KMM92a] János Kollár, Yoichi Miyaoka, and Shigefumi Mori, *Rational connectedness and boundedness of Fano manifolds*, Journal of Diff. Geom. **36** (1992), 765–769.
- [KMM92b] ———, *Rationally connected varieties*, Journal of Algebraic Geometry **1** (1992), 429–448.
- [Knu71] Donald Knutson, *Algebraic spaces*, Lecture Notes in Mathematics, vol. 203, Springer-Verlag, 1971.
- [Knu79] Donald Ervin Knuth, *Tau Epsilon Chi, a system for technical text*, American Mathematical Society, Providence, R.I., 1979, Revised version of Stanford Computer Science report number STAN-CS-78-675.
- [Knu02] Finn Faye Knudsen, *Determinant functors on exact categories and their extensions to categories of bounded complexes*, Michigan Math. J. **50** (2002), no. 2, 407–444.

- [Kol96] János Kollár, *Rational curves on algebraic varieties*, Ergebnisse der Mathematik und ihrer Grenzgebiete, 3. Folge, vol. 32, Springer-Verlag, 1996.
- [Kol97a] ———, *Quotient spaces modulo algebraic groups*, Ann. of Math. (2) **145** (1997), no. 1, 33–79.
- [Kol97b] ———, *Singularities of pairs*, Algebraic Geometry, Santa Cruz 1995, Proc. Sympos. Pure Math., vol. 62, Part I, Amer. Math. Soc., 1997, pp. 221–287.
- [Kol01] ———, *Which are the simplest algebraic varieties?*, Bull. Amer. Math. Soc. **38** (2001), 409–433.
- [Kol08] ———, *Quotients by finite equivalence relations*, 2008.
- [Kol15] János Kollár, *Coherence of local and global hulls*, ArXiv e-prints (2015).
- [Kol16] ———, *Variants of normality for Noetherian schemes*, Pure Appl. Math. Q. **12** (2016), no. 1, 1–31.
- [Kon95] Maxim Kontsevich, *Enumeration of rational curves via torus actions*, The moduli space of curves, Birkhäuser, 1995, pp. 335–368.
- [KP01] Bumsig Kim and Rahul Pandharipande, *The connectedness of the moduli space of maps to homogeneous spaces*, Symplectic geometry and mirror symmetry, World Scientific, 2001.
- [Kre99] Andrew Kresch, *Cycle groups for Artin stacks*, Invent. Math. **138** (1999), no. 3, 495–536.
- [Kre09] ———, *On the geometry of Deligne-Mumford stacks*, Algebraic geometry—Seattle 2005. Part 1, Proc. Sympos. Pure Math., vol. 80, Amer. Math. Soc., Providence, RI, 2009, pp. 259–271.
- [Kru32] Wolfgang Krull, *Allgemeine bewertungstheorie*, J. reine angew. Math **167** (1932), 160–196.
- [KS74] Gregory Maxwell Kelly and Ross Street, *Review of the elements of 2-categories*, Category Seminar (Proc. Sem., Sydney, 1972/1973), Springer, Berlin, 1974, pp. 75–103.
- [KS06] Masaki Kashiwara and Pierre Schapira, *Categories and sheaves*, Grundlehren der Mathematischen Wissenschaften, vol. 332, Springer-Verlag, Berlin, 2006.
- [KS10] Moritz Kerz and Alexander Schmidt, *On different notions of tameness in arithmetic geometry*, Math. Ann. **346** (2010), no. 3, 641–668.
- [Kuh03] Franz-Viktor Kuhlmann, *A correction to: “Elimination of wild ramification” [Invent. Math. **19** (1973), 235–249; MR0321929 (48 #294)] by H. P. Epp*, Invent. Math. **153** (2003), no. 3, 679–681.
- [Kun83] Kenneth Kunen, *Set theory*, Elsevier Science, 1983.
- [Kun86] Ernst Kunz, *Kähler differentials*, Advanced Lectures in Mathematics, Friedr. Vieweg & Sohn, Braunschweig, 1986.
- [KV04] Andrew Kresch and Angelo Vistoli, *On coverings of Deligne-Mumford stacks and surjectivity of the Brauer map*, Bull. London Math. Soc. **36** (2004), no. 2, 188–192.
- [KZ98] Steffen König and Alexander Zimmermann, *Derived equivalences for group rings*, Lecture Notes in Mathematics, vol. 1685, Springer-Verlag, Berlin, 1998, With contributions by Bernhard Keller, Markus Linckelmann, Jeremy Rickard and Raphaël Rouquier.
- [Laf02] Laurent Lafforgue, *Chtoucas de Drinfeld et correspondance de Langlands*, Invent. Math. **147** (2002), 1–241.
- [Laf04] Guillaume Lafon, *Une surface d’Enriques sans point sur $\mathbb{C}((t))$* , C. R. Math. Acad. Sci. Paris **338** (2004), no. 1, 51–54.
- [Lam99] Tsit Yuen Lam, *Lectures on modules and rings*, Graduate Texts in Mathematics, vol. 189, Springer-Verlag, New York, 1999.
- [Lan52] Serge Lang, *On quasi-algebraic closure*, Ann. Math. **55** (1952), 373–390.
- [Lan83] ———, *Abelian varieties*, Springer-Verlag, 1983.
- [Lan02] ———, *Algebra*, third ed., Graduate Texts in Mathematics, vol. 211, Springer-Verlag, New York, 2002.
- [Laz67] Daniel Lazard, *Disconnexités des spectres d’anneaux et des préschémas*, Bull. Soc. Math. France **95** (1967), 95–108.
- [Laz68] ———, *Deux méchants épimorphismes*, Séminaire d’Algèbre Commutative dirigé par Pierre Samuel: 1967/1968. Les épimorphismes d’anneaux, Secrétariat mathématique, Paris, 1968, pp. 1–5.

- [Laz69] ———, *Autour de la platitude*, Bull. Soc. Math. France **97** (1969), 81–128.
- [Lec86a] Christer Lech, *A method for constructing bad Noetherian local rings*, Algebra, algebraic topology and their interactions (Stockholm, 1983), Lecture Notes in Math., vol. 1183, Springer, Berlin, 1986, pp. 241–247.
- [Lec86b] Crister Lech, *Yet another proof of a result by Ogoma*, Algebra, algebraic topology and their interactions (Stockholm, 1983), Lecture Notes in Math., vol. 1183, Springer, Berlin, 1986, pp. 248–249.
- [Lee05] Jongmin Lee, *Relative canonical sheaves of a family of curves*, J. Algebra **286** (2005), no. 2, 341–360.
- [Len] Hendrik Willem Lenstra, *Galois theory for schemes*, pp. 1–109.
- [Lie06a] Max Lieblich, *Moduli of complexes on a proper morphism*, J. Algebraic Geom. **15** (2006), no. 1, 175–206.
- [Lie06b] ———, *Remarks on the stack of coherent algebras*, Int. Math. Res. Not. (2006).
- [Lie07] ———, *Moduli of twisted sheaves*, Duke Math. J. **138** (2007), no. 1, 23–118.
- [Lip69] Joseph Lipman, *Rational singularities, with applications to algebraic surfaces and unique factorization*, Inst. Hautes Études Sci. Publ. Math. (1969), no. 36, 195–279.
- [Lip78] ———, *Desingularization of two-dimensional schemes*, Ann. Math. (2) **107** (1978), no. 1, 151–207.
- [Lip09] ———, *Notes on derived functors and Grothendieck duality*, Foundations of Grothendieck duality for diagrams of schemes, Lecture Notes in Math., vol. 1960, Springer, Berlin, 2009, pp. 1–259.
- [Liu02] Qing Liu, *Algebraic geometry and arithmetic curves*, Oxford Graduate Texts in Mathematics, vol. 6, Oxford University Press, Oxford, 2002, Translated from the French by Reinie Ern e, Oxford Science Publications.
- [LLPY01] Dan Lee, Leanne Leer, Shara Pilch, and Yu Yasufuku, *Characterization of completions of reduced local rings*, Proc. Amer. Math. Soc. **129** (2001), no. 11, 3193–3200.
- [LMB00] G erard Laumon and Laurent Moret-Bailly, *Champs alg ebriques*, Ergebnisse der Mathematik und ihrer Grenzgebiete. 3. Folge., vol. 39, Springer-Verlag, 2000.
- [LN07] Joseph Lipman and Amnon Neeman, *Quasi-perfect scheme-maps and boundedness of the twisted inverse image functor*, Illinois J. Math. **51** (2007), no. 1, 209–236.
- [LO08a] Yves Laszlo and Martin Olsson, *The six operations for sheaves on Artin stacks. I. Finite coefficients*, Publ. Math. Inst. Hautes  tudes Sci. (2008), no. 107, 109–168.
- [LO08b] ———, *The six operations for sheaves on Artin stacks. II. Adic coefficients*, Publ. Math. Inst. Hautes  tudes Sci. (2008), no. 107, 169–210.
- [LO08c] Max Lieblich and Brian Osserman, *Functorial reconstruction theorem for stacks*, math.AG/0807.4562 (2008).
- [Loe03] S. Loewp, *Characterization of completions of excellent domains of characteristic zero*, J. Algebra **265** (2003), no. 1, 221–228.
- [LR08] Tsit Yuen Lam and Manuel Lionel Reyes, *A prime ideal principle in commutative algebra*, Journal of Algebra **319** (2008), no. 7, 3006–3027.
- [LS67] S. Lichtenbaum and M. Schlessinger, *The cotangent complex of a morphism*, Trans. Amer. Math. Soc. **128** (1967), 41–70.
- [LS08] Christian Lundkvist and Roy Skjelnes, *Non-effective deformations of Grothendieck’s Hilbert functor*, Math. Z. **258** (2008), no. 3, 513–519.
- [Lur04] Jacob Lurie, *Derived algebraic geometry*, 2004.
- [Lur09a] ———, *Derived algebraic geometry I: Stable infinity categories*.
- [Lur09b] ———, *Derived algebraic geometry II: Noncommutative algebra*.
- [Lur09c] ———, *Derived algebraic geometry III: Commutative algebra*.
- [Lur09d] ———, *Derived algebraic geometry IV: Deformation theory*.
- [Lur09e] ———, *Derived algebraic geometry V: Structured spaces*.
- [Lur09f] ———, *Higher topos theory*, Annals of Mathematics Studies, vol. 170, Princeton University Press, Princeton, NJ, 2009.
- [Lur11] ———, *Derived algebraic geometry XII: Proper morphisms, completions, and the grothendieck existence theorem*.
- [L ut93] W. L utkebohmert, *On compactification of schemes*, Manuscripta Math. **80** (1993), no. 1, 95–111.
- [LW54] Serge Lang and Andr e Weil, *Number of points of varieties in finite fields*, Amer. J. Math. **76** (1954), 819–827.

- [Mat70a] Hideyuki Matsumura, *Commutative algebra*, W. A. Benjamin, Inc., 1970.
- [Mat70b] Arthur Mattuck, *Complete ideals and monoidal transforms*, Proc. Amer. Math. Soc. **26** (1970), 555–560.
- [Mat78] Eben Matlis, *The higher properties of R -sequences*, J. Algebra **50** (1978), no. 1, 77–112.
- [Mat86] Hideyuki Matsumura, *Commutative ring theory*, Cambridge studies in advanced mathematics, vol. 8, Cambridge University Press, 1986.
- [Mat02] Kenji Matsuki, *Introduction to the Mori program*, Universitext, Springer-Verlag, 2002.
- [Maz68] Pierre Mazet, *Générateurs, relations et épimorphismes d’anneaux*, C. R. Acad. Sci. Paris Sér. A-B **266** (1968).
- [Maz89] B. Mazur, *Deforming Galois representations*, Galois groups over \mathbf{Q} (Berkeley, CA, 1987), Math. Sci. Res. Inst. Publ., vol. 16, Springer, New York, 1989, pp. 385–437.
- [MB96] Laurent Moret-Bailly, *Un problème de descente*, Bull. Soc. Math. France **124** (1996), no. 4, 559–585.
- [McC57] Neal H. McCoy, *Annihilators in polynomial rings*, Amer. Math. Monthly **64** (1957), 28–29.
- [McC01] John McCleary, *A user’s guide to spectral sequences*, second ed., Cambridge Studies in Advanced Mathematics, vol. 58, Cambridge University Press, Cambridge, 2001.
- [McQ02] Michael McQuillan, *Formal formal schemes*, Topology and geometry: commemorating SISTAG, Contemp. Math., vol. 314, Amer. Math. Soc., Providence, RI, 2002, pp. 187–198.
- [Mes00] Bachuki Mesablishvili, *Pure morphisms of commutative rings are effective descent morphisms for modules—a new proof*, Theory Appl. Categ. **7** (2000), no. 3, 38–42.
- [Mes02] ———, *On some properties of pure morphisms of commutative rings*, Theory Appl. Categ. **10** (2002), no. 9, 180–186.
- [Met05] David Metzler, *Topological and smooth stacks*, math.DG/0306176 (2005).
- [MFK94] David Mumford, John Fogarty, and Frances Kirwan, *Geometric invariant theory*, 3d ed., Ergebnisse der Math., vol. 34, Springer-Verlag, 1994.
- [Mil17] George Abram Miller, *The Obsolete in Mathematics*, Amer. Math. Monthly **24** (1917), no. 10, 453–456.
- [Mil80] James Stuart Milne, *Étale cohomology*, Princeton Mathematical Series, vol. 33, Princeton University Press, Princeton, N.J., 1980.
- [ML63] Saunders Mac Lane, *Homology*, Die Grundlehren der mathematischen Wissenschaften, Bd. 114, Academic Press Inc., Publishers, New York, 1963.
- [MM86] Yoichi Miyaoka and Shigefumi Mori, *A numerical criterion for uniruledness*, Ann. of Math. **124** (1986), 65–69.
- [Moo55] John Coleman Moore, *Homotopie des complexes monoidaux*, Secrétariat mathématique, 11 rue Pierre Curie, Paris, 1955.
- [Mor42] Ugo Morin, *Sull’unirazionalità dell’ipersuperficie algebrica di qualunque ordine e dimensione sufficientemente alta*, Atti 2. Congr. Un. Mat. Ital., Bologna, 1940, Edizione Cremonense, 1942, pp. 298–302.
- [MP98] Robert MacPherson and Claudio Procesi, *Making conical compactifications wonderful*, Selecta Math. (N. S.) **4** (1998), 125–139.
- [MR70] B. Mazur and L. Roberts, *Local Euler characteristics*, Invent. Math. **9** (1969/1970), 201–234.
- [MT01] Dimitri Markushevich and Alexander Tikhimirov, *The Abel-Jacobi map of a moduli component of vector bundles on the cubic threefold*, Journal of Algebraic Geometry **10** (2001), 37–62.
- [Mum61] David Mumford, *The topology of normal singularities of an algebraic surface and a criterion for simplicity*, Inst. Hautes Études Sci. Publ. Math. (1961), no. 9, 5–22.
- [Mum62] ———, *Further pathologies in algebraic geometry*, Amer. J. Math. **84** (1962), 642–648.
- [Mum65] ———, *Picard groups of moduli problems*, Arithmetical Algebraic Geometry (Proc. Conf. Purdue Univ., 1963), Harper & Row, New York, 1965, pp. 33–81.
- [Mum66] ———, *Lectures on curves on an algebraic surface*, Annals of Mathematics Studies, vol. 59, Princeton University Press, 1966.

- [Mum68] ———, *Rational equivalence of 0-cycles on surfaces*, Journal of Mathematics of Kyoto University **9** (1968), 195–204.
- [Mum70] ———, *Abelian varieties*, Tata Institute of Fundamental Research Studies in Mathematics, vol. 5, Oxford University Press, 1970.
- [Mum75] ———, *Pathologies IV*, Amer. J. Math. **97** (1975), no. 3, 847–849.
- [Mum88a] ———, *The red book of varieties and schemes*, Lecture Notes in Mathematics, vol. 1358, Springer-Verlag, 1988.
- [Mum88b] ———, *The red book of varieties and schemes*, Lecture Notes in Mathematics, vol. 1358, Springer-Verlag, 1988.
- [Mur67] J. P. Murre, *Lectures on an introduction to Grothendieck’s theory of the fundamental group*, Tata Institute of Fundamental Research, Bombay, 1967, Notes by S. Anantharaman, Tata Institute of Fundamental Research Lectures on Mathematics, No 40.
- [Mur95] Jakob Pieter Murre, *Representation of unramified functors. Applications (according to unpublished results of A. Grothendieck)*, Séminaire Bourbaki, Vol. 9, Soc. Math. France, Paris, 1995, pp. 243–261.
- [MV99] Fabien Morel and Vladimir Voevodsky, \mathbf{A}^1 -homotopy theory of schemes, Inst. Hautes Études Sci. Publ. Math. (1999), no. 90, 45–143 (2001).
- [Nag56] Masayoshi Nagata, *On the imbedding problem of abstract varieties in projective varieties*, Mem. Coll. Sci. Univ. Kyoto. Ser. A. Math. **30** (1956), 71–82.
- [Nag57a] ———, *On the imbeddings of abstract surfaces in projective varieties*, Mem. Coll. Sci. Univ. Kyoto. Ser. A. Math. **30** (1957), 231–235.
- [Nag57b] ———, *A remark on the unique factorization theorem*, J. Math. Soc. Japan **9** (1957), 143–145.
- [Nag58] ———, *Remarks on a paper of Zariski on the purity of branch loci*, Proc. Nat. Acad. Sci. U.S.A. **44** (1958), 796–799.
- [Nag59] ———, *On the purity of branch loci in regular local rings*, Illinois J. Math. **3** (1959), 328–333.
- [Nag62a] ———, *Imbedding of an abstract variety in a complete variety*, J. Math. Kyoto Univ. **2** (1962), 1–10.
- [Nag62b] ———, *Local rings*, Interscience Tracts in Pure and Applied Mathematics, No. 13, Interscience Publishers a division of John Wiley & Sons New York-London, 1962.
- [Nag63] ———, *A generalization of the imbedding problem of an abstract variety in a complete variety*, J. Math. Kyoto Univ. **3** (1963), 89–102.
- [Nag66] ———, *Finitely generated rings over a valuation ring*, J. Math. Kyoto Univ. **5** (1966), 163–169.
- [Nak01] Iku Nakamura, *Hilbert schemes of abelian group orbits*, Journal of Algebraic Geometry **10** (2001), 757–779.
- [Nee96] Amnon Neeman, *The Grothendieck duality theorem via Bousfield’s techniques and Brown representability*, J. Amer. Math. Soc. **9** (1996), no. 1, 205–236.
- [Nee01] ———, *Triangulated categories*, Annals of Mathematics Studies, vol. 148, Princeton University Press, Princeton, NJ, 2001.
- [Nee02] ———, *A counterexample to a 1961 “theorem” in homological algebra*, Invent. Math. **148** (2002), no. 2, 397–420, With an appendix by P. Deligne.
- [Nee11] A. Neeman, *Rigid dualizing complexes*, Bull. Iranian Math. Soc. **37** (2011), no. 2, 273–290.
- [Nee14] Amnon Neeman, *An improvement on the base-change theorem and the functor f -shriek*.
- [Nis81] Jun-ichi Nishimura, *On ideal-adic completion of Noetherian rings*, J. Math. Kyoto Univ. **21** (1981), no. 1, 153–169.
- [Nis12] ———, *A few examples of local rings, I*, Kyoto J. Math. **52** (2012), no. 1, 51–87.
- [Nob77] Augusto Nobile, *A note on flat algebras*, Proc. Amer. Math. Soc. **64** (1977), no. 2, 206–208.
- [Noo05] Behrang Noohi, *Foundations of topological stacks I*, math.AG/0503247v1 (2005).
- [Nyg78] Niels Nygaard, *On the fundamental group of a unirational 3-fold*, Inventiones Math. **44** (1978), no. 1, 75–86.
- [Ogo80] Tetsushi Ogoma, *Noncatenary pseudogeometric normal rings*, Japan. J. Math. (N.S.) **6** (1980), no. 1, 147–163.

- [Ogo94] ———, *General Néron desingularization based on the idea of Popescu*, J. Algebra **167** (1994), no. 1, 57–84.
- [Oli70] Jean-Pierre Olivier, *Descente par morphismes purs*, C. R. Acad. Sci. Paris Sér. A-B **271** (1970), A821–A823.
- [Oli83] ———, *Going up along absolutely flat morphisms*, J. Pure Appl. Algebra **30** (1983), no. 1, 47–59.
- [Ols05] Martin Christian Olsson, *On proper coverings of Artin stacks*, Adv. Math. **198** (2005), no. 1, 93–106.
- [Ols06a] ———, *Deformation theory of representable morphisms of algebraic stacks*, Math. Z. **253** (2006), no. 1, 25–62.
- [Ols06b] ———, *Hom-stacks and restriction of scalars*, Duke Math. J. **134** (2006), no. 1, 139–164.
- [Ols07a] ———, *Course notes for Math 274: Stacks, taken by Anton Geraschenko*.
- [Ols07b] ———, *Sheaves on Artin stacks*, J. Reine Angew. Math. **603** (2007), 55–112.
- [Oor66] Frans Oort, *Algebraic group schemes in characteristic zero are reduced*, Invent. Math. **2** (1966), 79–80.
- [OP10] Brian Osserman and Sam Payne, *Lifting tropical intersections*, 2010.
- [Orl97] D. O. Orlov, *Equivalences of derived categories and K3 surfaces*, J. Math. Sci. (New York) **84** (1997), no. 5, 1361–1381, Algebraic geometry, 7.
- [OS03] Martin Christian Olsson and Jason Starr, *Quot functors for Deligne-Mumford stacks*, Comm. Algebra **31** (2003), no. 8, 4069–4096, Special issue in honor of Steven L. Kleiman.
- [OSS80] Christian Okonek, Michael Schneider, and Heinz Spindler, *Vector bundles on complex projective spaces*, Progress in Mathematics, vol. 3, Birkhäuser Boston, Mass., 1980.
- [Oss15] Brian Osserman, *Relative dimension of morphisms and dimension for algebraic stacks*, J. Algebra **437** (2015), 52–78.
- [Pan97] Rahul Pandharipande, *The canonical class of $\overline{M}_{0,n}(\mathbb{P}^r, d)$ and enumerative geometry*, Internat. Math. Res. Notices **4** (1997), 173–186.
- [Pan99] ———, *Intersections of Q -divisors on Kontsevich’s moduli space*, Trans. Amer. Math. Soc. **351** (1999), 1481–1505.
- [Par94] Kapil Hari Paranjape, *Cohomological and cycle theoretic connectivity*, Ann. of Math. **139** (1994), 641–660.
- [Per75] Daniel Perrin, *Schémas en groupes quasi-compacts sur un corps et groupes henséliens*, Publications Mathématiques d’Orsay **165**, 75–46 (1975), 148.
- [Per76] ———, *Approximation des schémas en groupes, quasi compacts sur un corps*, Bull. Soc. Math. France **104** (1976), no. 3, 323–335.
- [Per08] Fabio Perroni, *A note on toric Deligne-Mumford stacks*, Tohoku Math. J. (2) **60** (2008), no. 3, 441–458.
- [Pes66] Christian Peskine, *Une généralisation du “main theorem” de Zariski*, Bull. Sci. Math. (2) **90** (1966), 119–127.
- [Pon98] K. N. Ponomarëv, *Solvable elimination of ramification in extensions of discretely valued fields*, Algebra i Logika **37** (1998), no. 1, 63–87, 123.
- [Pon99] ———, *Some generalizations of Abhyankar’s lemma*, Algebra and model theory, 2 (Érlagol, 1999), Novosibirsk State Tech. Univ., Novosibirsk, 1999, pp. 119–129, 165.
- [Poo05] Bjorn Poonen, *Varieties without extra automorphisms. III. Hypersurfaces*, Finite Fields Appl. **11** (2005), no. 2, 230–268.
- [Pop81] Dorin Popescu, *Global form of Néron’s p -desingularization and approximation*, Proceedings of the Week of Algebraic Geometry (Bucharest, 1980) (Leipzig), Teubner-Texte Math., vol. 40, Teubner, 1981, pp. 139–157.
- [Pop85] ———, *General Néron desingularization*, Nagoya Math. J. **100** (1985), 97–126.
- [Pop86] ———, *General Néron desingularization and approximation*, Nagoya Math. J. **104** (1986), 85–115.
- [Pop90] ———, *Letter to the editor: “General Néron desingularization and approximation”* [*Nagoya Math. J.* **104** (1986), 85–115; MR0868439 (88a:14007)], Nagoya Math. J. **118** (1990), 45–53.
- [Pre49] Arno Predonzan, *Sull’ unirationalità della varietà intersezione completa di più forme*, Rend. Sem. Math. Padova **18** (1949), 161–176.

- [PS85] Ragni Piene and Michael Schlessinger, *On the Hilbert scheme compactification of the space of twisted cubics*, Amer. J. Math. **107** (1985), no. 4, 761–774.
- [Qui] Daniel Quillen, *Homology of commutative rings*, Unpublished, pp. 1–81.
- [Qui67] Daniel Gray Quillen, *Homotopical algebra*, Lecture Notes in Mathematics, No. 43, Springer-Verlag, Berlin, 1967.
- [Qui70] Daniel Quillen, *On the (co-) homology of commutative rings*, Applications of Categorical Algebra (Proc. Sympos. Pure Math., Vol. XVII, New York, 1968), Amer. Math. Soc., Providence, R.I., 1970, pp. 65–87.
- [Rai59] John Rainwater, *A note on projective resolutions*, Proc. Amer. Math. Soc. **10** (1959), 734–735.
- [Ran89] Ziv Ran, *Deformations of maps*, Algebraic curves and projective geometry (Trento, 1988), Lecture Notes in Math., vol. 1389, Springer, Berlin, 1989, pp. 246–253.
- [Rat71] L. J. Ratliff, Jr., *Characterizations of catenary rings*, Amer. J. Math. **93** (1971), 1070–1108.
- [Ray70a] Michel Raynaud, *Anneaux locaux henséliens*, Lecture Notes in Mathematics, vol. 169, Springer-Verlag, 1970.
- [Ray70b] ———, *Faisceaux amples sur les schémas en groupes et les espaces homogènes*, Lecture Notes in Mathematics, Vol. 119, Springer-Verlag, Berlin-New York, 1970.
- [Ray70c] ———, *Spécialisation du foncteur de Picard*, Inst. Hautes Études Sci. Publ. Math. **38** (1970), 27–76.
- [Ray72] ———, *Anneaux henséliens et approximations*, Colloque d'Algèbre Commutative (Rennes, 1972), Exp. No. 13, Univ. Rennes, Rennes, 1972, p. 9.
- [Ray74] Michèle Raynaud, *Théorèmes de Lefschetz en cohomologie des faisceaux cohérents et en cohomologie étale. Application au groupe fondamental*, Ann. Sci. École Norm. Sup. (4) **7** (1974), 29–52, Collection of articles dedicated to Henri Cartan on the occasion of his 70th birthday, I.
- [Ray75] ———, *Théorèmes de Lefschetz en cohomologie cohérente et en cohomologie étale*, Société Mathématique de France, Paris, 1975, Bull. Soc. Math. France, Mém. No. 41, Supplément au Bull. Soc. Math. France, Tome 103.
- [Ree61] David Rees, *A note on analytically unramified local rings*, J. London Math. Soc. **36** (1961), 24–28.
- [Rei] Philipp Michael Reinhard, *Andre-quillen homology for simplicial algebras and ring spectra*.
- [Rei80] Miles Reid, *Canonical threefolds*, Géométrie Algébrique Angers (A. Beauville, ed.), Sijthoff and Noordhoff, 1980, pp. 273–310.
- [Rei87] ———, *Young person's guide to singularities*, Algebraic Geometry–Bowdoin 1985 (Spencer Bloch, ed.), AMS, 1987, pp. 345–414.
- [Ric89a] Jeremy Rickard, *Derived categories and stable equivalence*, J. Pure Appl. Algebra **61** (1989), no. 3, 303–317.
- [Ric89b] ———, *Morita theory for derived categories*, J. London Math. Soc. (2) **39** (1989), no. 3, 436–456.
- [Rie65] Marc Aristide Rieffel, *A general Wedderburn theorem*, Proc. Nat. Acad. Sci. U.S.A. **54** (1965), 1513.
- [Rob72] Joel Roberts, *Chow's moving lemma*, Algebraic geometry, Oslo 1970 (Proc. Fifth Nordic Summer School in Math.), Wolters-Noordhoff, Groningen, 1972, Appendix 2 to: “Motives” (in Algebraic geometry, Oslo 1970 (Proc. Fifth Nordic Summer School in Math.)), pp. 53–82, Wolters-Noordhoff, Groningen, 1972) by Steven L. Kleiman, pp. 89–96.
- [Rod87] Antonio G. Rodicio, *Local rings whose formal fibres are complete intersections*, Extracta Math. **2** (1987), no. 2, 71–73.
- [Rod88] ———, *On a result of Avramov*, Manuscripta Math. **62** (1988), no. 2, 181–185.
- [Rom03] Matthieu Romagny, *A note on group actions on algebraic stacks*, math.AG/0305243 (2003).
- [Rom05] ———, *Group actions on stacks and applications*, Michigan Math. J. **53** (2005), no. 1, 209–236.
- [Ros09] Joseph Ross, *The hilbert-chow morphism and the incidence divisor*, Columbia University PhD thesis, 2009.

- [Rot90] Christel Rotthaus, *Rings with approximation property*, Math. Ann. **287** (1990), no. 3, 455–466.
- [Rou08] Raphaël Rouquier, *Dimensions of triangulated categories*, J. K-Theory **1** (2008), no. 2, 193–256.
- [RT07] Julius Ross and Richard Thomas, *A study of the Hilbert-Mumford criterion for the stability of projective varieties*, J. Algebraic Geom. **16** (2007), no. 2, 201–255.
- [Ryd07a] David Rydh, *Existence of quotients by finite groups and coarse moduli spaces*, math.AG/0708.3333 (2007).
- [Ryd07b] ———, *Submersions and effective descent of étale morphisms*, math.AG/0710.2488 (2007).
- [Ryd08] ———, *Noetherian approximation of algebraic spaces and stacks*, math.AG/0904.0227 (2008).
- [Ryd10] ———, *étale dévissage, descent and pushouts of stacks*, math.AG/1005.2171v1 (2010).
- [Ryd11] ———, *Representability of Hilbert schemes and Hilbert stacks of points*, Comm. Algebra **39** (2011), no. 7, 2632–2646.
- [Sai87] Takeshi Saito, *Vanishing cycles and geometry of curves over a discrete valuation ring*, Amer. J. Math. **109** (1987), no. 6, 1043–1085.
- [Sal81] David J. Saltman, *The Brauer group is torsion*, Proc. Amer. Math. Soc. **81** (1981), no. 3, 385–387.
- [Sam56] Pierre Samuel, *Rational equivalence of arbitrary cycles*, Amer. J. Math. **78** (1956), 383–400.
- [Sam68] ———, *Unique factorization*, Amer. Math. Monthly **75** (1968), 945–952.
- [Sch68] Michael Schlessinger, *Functors of Artin rings*, Trans. Amer. Math. Soc. **130** (1968), 208–222.
- [Sch92] Claus Scheiderer, *Quasi-augmented simplicial spaces, with an application to cohomological dimension*, Journal of Pure and Applied Algebra **81** (1992), no. 3, 293–311.
- [Sch14] Stefan Schroeer, *Points in the fppf topology*, 24.
- [Ser53] Jean-Pierre Serre, *Groupes d’homotopie et classes de groupes abéliens*, Ann. of Math. (2) **58** (1953), 258–294.
- [Ser55a] ———, *Applications algébriques de la cohomologie des groupes. II: Théorie des algèbres simples*, Secrétariat mathématique, 11 rue Pierre Curie, Paris, 1955.
- [Ser55b] ———, *Faisceaux algébriques cohérents*, Ann. of Math. (2) **61** (1955), 197–278.
- [Ser57] ———, *Sur la cohomologie des variétés algébriques*, J. Math. Pures Appl. (9) **36** (1957), 1–16.
- [Ser62] ———, *Corps locaux*, Publications de l’Institut de Mathématique de l’Université de Nancago, VIII, Actualités Sci. Indust., No. 1296. Hermann, Paris, 1962.
- [Ser65] ———, *Algèbre locale. Multiplicités*, Cours au Collège de France, 1957–1958, rédigé par Pierre Gabriel. Seconde édition, 1965. Lecture Notes in Mathematics, vol. 11, Springer-Verlag, Berlin, 1965.
- [Ser86] Edoardo Sernesi, *Topics on families of projective varieties*, Queen’s Papers in Pure and Applied Mathematics, vol. 73, Queen’s University, 1986.
- [Ser97] Jean-Pierre Serre, *Galois cohomology*, Springer Monographs in Mathematics, Springer-Verlag, 1997.
- [Ser00] ———, *Local algebra*, Springer Monographs in Mathematics, Springer-Verlag, Berlin, 2000, Translated from the French by CheeWhye Chin and revised by the author.
- [Ser03] Christian Serpé, *Resolution of unbounded complexes in Grothendieck categories*, J. Pure Appl. Algebra **177** (2003), no. 1, 103–112.
- [Ses72] Conjeevaram Srirangachari Seshadri, *Quotient spaces modulo reductive algebraic groups*, Ann. of Math. (2) **95** (1972), 511–556.
- [Sha79] Rodney Y. Sharp, *Necessary conditions for the existence of dualizing complexes in commutative algebra*, Séminaire d’Algèbre Paul Dubreil 31ème année (Paris, 1977–1978), Lecture Notes in Math., vol. 740, Springer, Berlin, 1979, pp. 213–229.
- [Shi77] Tetsuji Shioda, *Some results on unirationality of algebraic surfaces*, Mathematische Annalen **230** (1977), 153–168.
- [Sil86] Joseph Hillel Silverman, *The arithmetic of elliptic curves*, Graduate Texts in Mathematics, no. 106, Springer-Verlag, 1986.

- [Sim91] Carlos Simpson, *Nonabelian Hodge theory*, Proceedings of the International Congress of Mathematicians, Vol. I, II (Kyoto, 1990), Math. Soc. Japan, 1991, pp. 747–756.
- [Smy13] David Ishii Smyth, *Towards a classification of modular compactifications of $\mathcal{M}_{g,n}$* , Invent. Math. **192** (2013), no. 2, 459–503.
- [Spa88] Nicolas Spaltenstein, *Resolutions of unbounded complexes*, Compositio Math. **65** (1988), no. 2, 121–154.
- [Spi99] Mark Spivakovsky, *A new proof of D. Popescu’s theorem on smoothing of ring homomorphisms*, J. Amer. Math. Soc. **12** (1999), no. 2, 381–444.
- [SR72] Neantro Saavedra-Rivano, *Catégories tannakiennes*, Bull. Soc. Math. France **100** (1972), 417–430.
- [Sta] The Stacks Project Authors, *Stacks Project*.
- [Sta03a] Jason Starr, *Explicit computations related to Rational connectivity . . . by Graber, Harris, Mazur and Starr*, in preparation, 2003.
- [Sta03b] ———, *Kodaira dimensions of spaces of rational curves on low degree hypersurfaces*, in preparation, 2003.
- [Sta04a] ———, *Global sections of some vector bundles on Kontsevich moduli spaces*, preprint, 2004.
- [Sta04b] ———, *Hypersurfaces of low degree are rationally 1-connected*, in preparation, 2004.
- [Sta06] ———, *Artin’s axioms, composition and moduli spaces*, math.AG/0602646 (2006).
- [Ste88] Jan Stevens, *On canonical singularities as total spaces of deformations*, Abh. Math. Sem. Univ. Hamburg **58** (1988), 275–283.
- [Swa98] Richard Gordon Swan, *Néron-Popescu desingularization*, Algebra and geometry (Taipei, 1995), Lect. Algebra Geom., vol. 2, Int. Press, Cambridge, MA, 1998, pp. 135–192.
- [Tat57] John Tate, *Homology of Noetherian rings and local rings*, Illinois J. Math. **1** (1957), 14–27.
- [Tat76] ———, *Relations between $k2$ and galois cohomology*, Inventiones mathematicae **36** (1976), 257–274.
- [Tau49] Olga Taussky, *A recurring theorem on determinants*, Amer. Math. Monthly **56** (1949), 672–676.
- [Tei95] Bernard Teissier, *Résultats récents sur l’approximation des morphismes en algèbre commutative (d’après André, Artin, Popescu et Spivakovsky)*, Astérisque (1995), no. 227, 259–282, Séminaire Bourbaki, Vol. 1993/94.
- [Tem10] Michael Temkin, *Stable modification of relative curves*, J. Algebraic Geom. **19** (2010), no. 4, 603–677.
- [Toë99] Bertrand Toën, *Théorèmes de Riemann-Roch pour les champs de Deligne-Mumford*, K-theory **18** (1999), 33–76.
- [Toë09] ———, *Higher and derived stacks: a global overview*, Algebraic geometry—Seattle 2005. Part 1, Proc. Sympos. Pure Math., vol. 80, Amer. Math. Soc., Providence, RI, 2009, pp. 435–487.
- [Tot04] Burt Totaro, *The resolution property for schemes and stacks*, J. Reine Angew. Math. **577** (2004), 1–22.
- [Tot14] ———, *Group cohomology and algebraic cycles*, Cambridge Tracts in Mathematics, vol. 204, Cambridge University Press, Cambridge, 2014.
- [Tse33] Chiungtze Tsen, *Divisionalgebren über Funktionenkörper*, Nachr. Ges. Wiss. Göttingen (1933), 335.
- [Tse36] ———, *Quasi-algebraische-abgeschlossene Funktionenkörper*, J. Chinese Math. **1** (1936), 81–92.
- [TSH98] Nobuhiko Tatsuuma, Hiroaki Shimomura, and Takeshi Hirai, *On group topologies and unitary representations of inductive limits of topological groups and the case of the group of diffeomorphisms*, J. Math. Kyoto Univ. **38** (1998), no. 3, 551–578.
- [TT90] Robert Wayne Thomason and Thomas Trobaugh, *Higher algebraic K-theory of schemes and of derived categories*, The Grothendieck Festschrift, Vol. III, Progr. Math., vol. 88, Birkhäuser Boston, Boston, MA, 1990, pp. 247–435.
- [TT13] Michael Temkin and Ilya Tyomkin, *Ferrand’s pushouts for algebraic spaces*, 2013.
- [TV05] Bertrand Toën and Gabriele Vezzosi, *Homotopical algebraic geometry. I. Topos theory*, Adv. Math. **193** (2005), no. 2, 257–372.

- [TV08] ———, *Homotopical algebraic geometry. II. Geometric stacks and applications*, Mem. Amer. Math. Soc. **193** (2008), no. 902, x+224.
- [TV13] Mattia Talpo and Angelo Vistoli, *Deformation theory from the point of view of fibered categories*, Handbook of moduli. Vol. III, Adv. Lect. Math. (ALM), vol. 26, Int. Press, Somerville, MA, 2013, pp. 281–397.
- [Tyu71] Andrei Tyurin, *Geometry of the Fano surface of a non-singular cubic $F \subset \mathbb{P}^4$ and Torelli theorems for Fano surfaces and cubics*, Izvestiya Akademii Nauk SSSR. Seriya Matematicheskaya **35** (1971), 498–529.
- [Vak] Ravi Vakil, *MATH 216: Foundations of Algebraic Geometry*.
- [Vak06] ———, *Murphy's law in algebraic geometry: badly-behaved deformation spaces*, Invent. Math. **164** (2006), no. 3, 569–590.
- [VD83] Sergei Georgievich Vlèduť and Vladimir Gershonovich Drinfel'd, *The number of points of an algebraic curve*, Funktsional. Anal. i Prilozhen. **17** (1983), no. 1, 68–69.
- [vdB97] Michel van den Bergh, *Existence theorems for dualizing complexes over non-commutative graded and filtered rings*, J. Algebra **195** (1997), no. 2, 662–679.
- [vdP84] Marius van der Put, *Stable reductions of algebraic curves*, Nederl. Akad. Wetensch. Indag. Math. **46** (1984), no. 4, 461–478.
- [Ver96] Jean-Louis Verdier, *Des catégories dérivées des catégories abéliennes*, Astérisque (1996), no. 239, xii+253, With a preface by Luc Illusie, Edited and with a note by Georges Maltsiniotis.
- [Vie77] Eckart Viehweg, *Canonical divisors and the additivity of the kodaira dimension for morphisms of relative dimension one*, Comp. Math. **35** (1977), 197–223.
- [Vis89a] Angelo Vistoli, *Intersection theory on algebraic stacks and on their moduli spaces*, Invent. math. **97** (1989), 613–670.
- [Vis89b] ———, *Intersection theory on algebraic stacks and on their moduli spaces*, Invent. Math. **97** (1989), no. 3, 613–670.
- [Vis91] ———, *The Hilbert stack and the theory of moduli of families*, Geometry Seminars, 1988–1991 (Italian) (Bologna, 1988–1991), Univ. Stud. Bologna, Bologna, 1991, pp. 175–181.
- [Vis04] ———, *Notes on Grothendieck topologies, fibered categories and descent theory*, 2004.
- [Vis05] ———, *Grothendieck topologies, fibered categories and descent theory*, Fundamental algebraic geometry, Math. Surveys Monogr., vol. 123, Amer. Math. Soc., Providence, RI, 2005, pp. 1–104.
- [Voi86] Claire Voisin, *Théorème de Torelli pour les cubiques de \mathbb{P}^5* , Inventiones mathematicae **86** (1986), 577–601.
- [War69] R. B. Warfield, Jr., *Purity and algebraic compactness for modules*, Pacific J. Math. **28** (1969), 699–719.
- [War70] ———, *Decomposability of finitely presented modules*, Proc. Amer. Math. Soc. **25** (1970), 167–172.
- [Wat72] William C. Waterhouse, *An empty inverse limit*, Proc. Amer. Math. Soc. **36** (1972), 618.
- [Wat75] ———, *Basically bounded functors and flat sheaves*, Pacific J. Math. **57** (1975), no. 2, 597–610.
- [Wei48] André Weil, *Courbes algébriques et variétés abéliennes*, Hermann, 1948.
- [Win74] David Winter, *The structure of fields*, Graduate Texts in Mathematics, vol. 16, Springer-Verlag, 1974.
- [Yas09] Takehiko Yasuda, *Non-adic formal schemes*, Int. Math. Res. Not. IMRN (2009), no. 13, 2417–2475.
- [Yek10] Amnon Yekutieli, *Rigid dualizing complexes via differential graded algebras (survey)*, Triangulated categories, London Math. Soc. Lecture Note Ser., vol. 375, Cambridge Univ. Press, Cambridge, 2010, pp. 452–463.
- [Yek11] ———, *On flatness and completion for infinitely generated modules over noetherian rings*, Communications in Algebra (2011), 4221–4245.
- [Yon54] Nobuo Yoneda, *On the homology theory of modules*, J. Fac. Sci. Univ. Tokyo. Sect. I. **7** (1954), 193–227.
- [Yon60] ———, *On Ext and exact sequences*, J. Fac. Sci. Univ. Tokyo Sect. I **8** (1960), 507–576.

- [YZ09] Amnon Yekutieli and James J. Zhang, *Rigid dualizing complexes over commutative rings*, *Algebr. Represent. Theory* **12** (2009), no. 1, 19–52.
- [Zar58] Oscar Zariski, *On the purity of the branch locus of algebraic functions*, *Proc. Nat. Acad. Sci. U.S.A.* **44** (1958), 791–796.
- [ZK99] I. B. Zhukov and M. V. Koroteev, *Elimination of wild ramification*, *Algebra i Analiz* **11** (1999), no. 6, 153–177.
- [Zon14] Ying Zong, *Almost non-degenerate abelian fibrations*.