

## Publications and preprints of Nicholas M. Katz

[1unpub] Katz, Nicholas M. On a question of Bombieri and Bourgain. preprint, available on [www.math.princeton.edu/~nmk](http://www.math.princeton.edu/~nmk)

[2unpub] Katz, Nicholas M. Another look at the Dwork family. preprint, available on [www.math.princeton.edu/~nmk](http://www.math.princeton.edu/~nmk)

[3unpub] Katz, Nicholas M. Estimates for mixed character sums. preprint, available on [www.math.princeton.edu/~nmk](http://www.math.princeton.edu/~nmk)

[4unpub] Katz, Nicholas M. On a question of Browning and Heath-Brown. preprint, available on [www.math.princeton.edu/~nmk](http://www.math.princeton.edu/~nmk)

[5unpub] Katz, Nicholas M. Report on the irreducibility of L-functions, submitted for a volume in honor of Serge Lang, preprint, available on [www.math.princeton.edu/~nmk](http://www.math.princeton.edu/~nmk)

[6unpub] Katz, Nicholas M. Appendix: Lefschetz pencils with imposed subvarieties. preprint, available on [www.math.princeton.edu/~nmk](http://www.math.princeton.edu/~nmk)

[7unpub] Katz, Nicholas M. E-polynomials, zeta-equivalence, and polynomial-count varieties (appendix to a paper of Rodriguez-Villegas and Hausel). preprint, available on [www.math.princeton.edu/~nmk](http://www.math.princeton.edu/~nmk)

[8unpub] Katz, Nicholas M. Hooley parameters for families of exponential sums over finite fields. preprint, available on [www.math.princeton.edu/~nmk](http://www.math.princeton.edu/~nmk)

Katz, Nicholas M.  $G_2$  and Hypergeometric Sheaves, Finite Fields and Their Applications, to appear, available online 17 April 2006 at <http://www.sciencedirect.com>, 49pp.

Katz, Nicholas M., On a Question of Lillian Pierce, *Forum Mathematica* 18 (2006), 699-710.

**MR2183396 (2006j:14020)** Katz, Nicholas M. Moments, monodromy, and perversity: a Diophantine perspective. *Annals of Mathematics Studies*, 159. Princeton University Press, Princeton, NJ, 2005. viii+475 pp.

**MR2099770 (2005j:14024)** Esnault, Hélène; Katz, Nicholas M. Cohomological divisibility and point count divisibility. *Compos. Math.* 141 (2005), no. 1, 93--100.

**MR2144155** Arithmetic algebraic geometry. Abstracts from the workshop held August 1--7, 2004. Organized by Gerd Faltings, Günter Harder and Nicholas M. Katz. Oberwolfach Reports. Vol. 1, no. 3. *Oberwolfach Rep.* 1 (2004), no. 3, 1971--2013.

**MR2099087 (2005j:14008)** Katz, Nicholas M.; Pandharipande, Rahul Inequalities related to Lefschetz pencils and integrals of Chern classes. *Geometric aspects of Dwork theory. Vol. I, II*, 805--818, Walter de Gruyter GmbH & Co. KG, Berlin, 2004.

**MR2023284 (2005f:00015)** Geometric aspects of Dwork theory. Vol. I, II. Lectures from the Dwork trimester dedicated to Bernard Dwork held at the University of Padova, Padova, May--July 2001. Edited by Alan Adolphson, Francesco Baldassarri, Pierre Berthelot, Nicholas Katz and François Loeser. *Walter de Gruyter GmbH & Co. KG, Berlin*, 2004. Vol. I: xiv+554 pp.; Vol. II: pp. i--vi and 555--1129.

**MR2058618 (2005g:14039)** Katz, Nicholas M. Larsen's alternative, moments, and the monodromy of Lefschetz pencils. *Contributions to automorphic forms, geometry, and number theory*, 521--560, *Johns Hopkins Univ. Press, Baltimore, MD*, 2004.

**MR2045016 (2005h:11173)** Katz, Nicholas M. Notes on  $G$ - $2$ , determinants, and equidistribution. *Finite Fields Appl.* **10** (2004), no. 2, 221--269.

**MR2029869 (2005g:11055)** Poonen, Bjorn; Voloch, José Felipe Random Diophantine equations. With appendices by Jean-Louis Colliot-Thélène and Nicholas M. Katz. *Progr. Math.*, **226**, *Arithmetic of higher-dimensional algebraic varieties (Palo Alto, CA, 2002)*, 175--184, *Birkhäuser Boston, Boston, MA*, 2004.

**MR1956963 (2004c:14039)** Katz, Nicholas M. A semicontinuity result for monodromy under degeneration. *Forum Math.* **15** (2003), no. 2, 191--200.

**MR1883179 (2003a:11106)** Katz, Nicholas M. Estimates for nonsingular multiplicative character sums. *Int. Math. Res. Not.* **2002**, no. 7, 333--349.

**MR1875130 (2003i:11087)** Katz, Nicholas M. Twisted  $L$ -functions and monodromy. *Annals of Mathematics Studies*, **150**. *Princeton University Press, Princeton, NJ*, 2002. viii+249 pp.

**MR1879812 (2002k:11096)** Katz, Nicholas M. Corrections to: "Space filling curves over finite fields" [*Math. Res. Lett.* **6** (1999), no. 5-6, 613--624; [MR1739219 \(2001e:11067\)](#)]. *Math. Res. Lett.* **8** (2001), no. 5-6, 689--691.

**MR1868601 (2003e:11088)** Fouvry, E.; Katz, N. A general stratification theorem for exponential sums, and applications. *J. Reine Angew. Math.* **540** (2001), 115--166.

**MR1846353 (2003a:11153)** Katz, Nicholas M. Sato-Tate equidistribution of Kurlberg-Rudnick sums. *Internat. Math. Res. Notices* **2001**, no. 14, 711--728.

**MR1831948 (2002c:11066)** Katz, Nicholas M.  $L$ -functions and monodromy: four lectures on Weil II. *Adv. Math.* **160** (2001), no. 1, 81--132.

**MR1803935 (2002d:11069)** Katz, Nicholas M. Frobenius-Schur indicator and the ubiquity of Brock-Granville quadratic excess. Dedicated to Professor Chao Ko on the occasion of his 90th birthday. *Finite Fields Appl.* **7** (2001), no. 1, 45--69.

**MR1803934 (2002d:14028)** Katz, Nicholas M. Sums of Betti numbers in arbitrary characteristic. Dedicated to Professor Chao Ko on the occasion of his 90th birthday. *Finite Fields Appl.* **7** (2001), no. 1, 29--44.

**MR1815370 (2002b:14026)** de Jong, A. Johan; Katz, Nicholas M. Monodromy and the Tate conjecture: Picard numbers and Mordell-Weil ranks in families. *Israel J. Math.* **120** (2000), , part A, 47--79.

**MR1739219 (2001e:11067)** Katz, Nicholas M. Space filling curves over finite fields. *Math. Res. Lett.* **6** (1999), no. 5-6, 613--624.

**MR1715519 (2001d:11084)** Katz, Nicholas M. Estimates for "singular" exponential sums. *Internat. Math. Res. Notices* **1999**, no. 16, 875--899.

**MR1669973 (99m:01071)** Katz, Nicholas M.; Tate, John Bernard Dwork (1923--1998). *Notices Amer. Math. Soc.* **46** (1999), no. 3, 338--343.

**MR1659828 (2000b:11070)** Katz, Nicholas M.; Sarnak, Peter Random matrices, Frobenius eigenvalues, and monodromy. *American Mathematical Society Colloquium Publications*, **45**. American Mathematical Society, Providence, RI, 1999. xii+419 pp.

**MR1640151 (2000f:11114)** Katz, Nicholas M.; Sarnak, Peter Zeroes of zeta functions and symmetry. *Bull. Amer. Math. Soc. (N.S.)* **36** (1999), no. 1, 1--26.

**MR1458976** Katz, Nicholas Correction to: "On the monodromy groups attached to certain families of exponential sums" [Duke Math. J. **54** (1987), no. 1, 41--56; **MR0885774 (88i:11053)**]. *Duke Math. J.* **89** (1997), no. 1, 201.

**MR1409377 (97e:11089)** Katz, Nicholas M.; Zheng, Zhiyong On the uniform distribution of Gauss sums and Jacobi sums. *Analytic number theory, Vol. 2 (Allerton Park, IL, 1995)*, 537--558, *Progr. Math.*, **139**, Birkhäuser Boston, Boston, MA, 1996.

**MR1366651 (97e:14027)** Katz, Nicholas M. Rigid local systems. *Annals of Mathematics Studies*, **139**. Princeton University Press, Princeton, NJ, 1996. viii+223 pp.

**MR1341955 (97i:11120)** Katz, Nicholas M. A note on exponential sums. *Finite Fields Appl.* **1** (1995), no. 3, 395--398.

**MR1307398 (96h:11078)** Katz, Nicholas M. Perversity and exponential sums. II. Estimates for and inequalities among  $\#A$ -numbers. *Barsotti Symposium in Algebraic Geometry (Abano Terme, 1991)*, 205--252, *Perspect. Math.*, **15**, Academic Press, San Diego, CA, 1994.

**MR1265525 (95b:14017)** Katz, Nicholas M. Independence of  $\#A$  and weak Lefschetz. *Motives (Seattle, WA, 1991)*, 101--114, *Proc. Sympos. Pure Math.*, **55**, Part 1, Amer. Math. Soc., Providence, RI, 1994.

**MR1265520 (95j:14021)** Katz, Nicholas M. Review of  $\#A$ -adic cohomology. *Motives (Seattle, WA, 1991)*, 21--30, *Proc. Sympos. Pure Math.*, **55**, Part 1, Amer. Math. Soc., Providence, RI, 1994.

**MR1215651 (94h:11109)** Katz, Nicholas M. Estimates for Soto-Andrade sums. *J. Reine Angew. Math.* **438** (1993), 143--161.

**MR1161307 (94b:14013)** Katz, Nicholas M. Affine cohomological transforms, perversity, and monodromy. *J. Amer. Math. Soc.* **6** (1993), no. 1, 149--222.

**MR1161479 (93g:11089)** Fouvry, Étienne; Iwaniec, Henryk The divisor function over arithmetic progressions. With an appendix by Nicholas Katz. *Acta Arith.* **61** (1992), no. 3, 271--287.

**MR1114483 (92i:11061)** Hooley, C. On the number of points on a complete intersection over a finite field. With an appendix by Nicholas M. Katz. *J. Number Theory* **38** (1991), no. 3, 338--358.

**MR1106908 (92b:00052)** The Grothendieck Festschrift. Vol. III. A collection of articles written in honor of the 60th birthday of Alexander Grothendieck. Edited by P. Cartier, L. Illusie, N. M. Katz, G. Laumon, Y. Manin and K. A. Ribet. *Progress in Mathematics*, **88**. Birkhäuser Boston, Inc., Boston, MA, 1990. viii+495 pp.

**MR1106895 (92b:00051)** The Grothendieck Festschrift. Vol. II. A collection of articles written in honor of the 60th birthday of Alexander Grothendieck. Edited by P. Cartier, L. Illusie, N. M. Katz, G. Laumon, Y. Manin and K. A. Ribet. *Progress in Mathematics*, 87. Birkhäuser Boston, Inc., Boston, MA, 1990. viii+563 pp.

**MR1086877 (91h:00035)** The Grothendieck Festschrift. Vol. I. A collection of articles written in honor of the 60th birthday of Alexander Grothendieck. Edited by P. Cartier, L. Illusie, N. M. Katz, G. Laumon, Yu. Manin and K. A. Ribet. *Progress in Mathematics*, 86. Birkhäuser Boston, Inc., Boston, MA, 1990. xx+498 pp.

**MR1081536 (93a:14009)** Katz, Nicholas M. Exponential sums and differential equations. *Annals of Mathematics Studies*, 124. Princeton University Press, Princeton, NJ, 1990. xii+430 pp.

**MR1045392 (91d:11150)** Katz, Nicholas M. Factoring polynomials in finite fields: an application of Lang-Weil to a problem in graph theory. *Math. Ann.* 286 (1990), no. 4, 625--637.

**MR1032857 (91d:11067)** Katz, Nicholas M. Exponential sums over finite fields and differential equations over the complex numbers: some interactions. *Bull. Amer. Math. Soc. (N.S.)* 23 (1990), no. 2, 269--309.

**MR1097616 (92m:11080)** Katz, Nicholas M. Perversity and exponential sums. *Algebraic number theory*, 209--259, *Adv. Stud. Pure Math.*, 17, Academic Press, Boston, MA, 1989.

**MR1054286 (91e:11066)** Katz, Nicholas; Livné, Ron Sommes de Kloosterman et courbes elliptiques universelles en caractéristiques  $2$  et  $3$ . (French) [Kloosterman sums and universal elliptic curves in characteristics  $2$  and  $3$ ] *C. R. Acad. Sci. Paris Sér. I Math.* 309 (1989), no. 11, 723--726.

**MR1019967 (90i:14022)** Katz, Nicholas M.; Laumon, Gérard Erratum: "The Fourier transform and upper bounds for exponential sums" [Inst. Hautes Études Sci. Publ. Math. No. 62 (1985), 361--418; MR0823177 (87i:14017)]. (French) *Inst. Hautes Études Sci. Publ. Math.* No. 69 (1989), 233.

**MR0965007 (90b:11081)** Katz, Nicholas M. An estimate for character sums. *J. Amer. Math. Soc.* 2 (1989), no. 2, 197--200.

**MR0992205 (90h:14028)** Katz, Nicholas M. Travaux de Laumon. [Works of Laumon] Séminaire Bourbaki, Vol. 1987/88. *Astérisque* No. 161-162 (1988), Exp. No. 691, 4, 105--132 (1989).

**MR0955052 (91a:11028)** Katz, Nicholas M. Gauss sums, Kloosterman sums, and monodromy groups. *Annals of Mathematics Studies*, 116. Princeton University Press, Princeton, NJ, 1988. x+246 pp.

**MR0887396 (89c:14030)** Katz, Nicholas M. On a certain class of exponential sums. *J. Reine Angew. Math.* 377 (1987), 12--17.

**MR0885775 (88j:12005)** Katz, Nicholas M.; Pink, Richard A note on pseudo-CM representations and differential Galois groups. *Duke Math. J.* 54 (1987), no. 1, 57--65.

**MR0885774 (88i:11053)** Katz, Nicholas M. On the monodromy groups attached to certain families of exponential sums. *Duke Math. J.* 54 (1987), no. 1, 41--56.

**MR0878198 (88b:13001)** Katz, Nicholas M. A simple algorithm for cyclic vectors. *Amer. J. Math.* 109 (1987), no. 1, 65--70.

**MR0862711 (88c:12010)** Katz, Nicholas M. On the calculation of some differential Galois groups. *Invent. Math.* 87 (1987), no. 1, 13--61.

- MR0867916 (88a:14032)** Katz, Nicholas M. Local-to-global extensions of representations of fundamental groups. *Ann. Inst. Fourier (Grenoble)* 36 (1986), no. 4, 69--106.
- MR0823177 (87i:14017)** Katz, Nicholas M.; Laumon, Gérard Transformation de Fourier et majoration de sommes exponentielles. (French) [The Fourier transform and upper bounds for exponential sums] *Inst. Hautes Études Sci. Publ. Math. No. 62* (1985), 361--418.
- MR0816366 (87a:14019)** Katz, Nicholas M. Internal reconstruction of unit-root  $\mathbb{F}_q$ -crystals via expansion-coefficients. With an appendix by Luc Illusie. *Ann. Sci. École Norm. Sup. (4)* 18 (1985), no. 2, 245--285.
- MR0772569 (86i:11024)** Katz, Nicholas M.; Mazur, Barry Arithmetic moduli of elliptic curves. *Annals of Mathematics Studies*, 108. Princeton University Press, Princeton, NJ, 1985. xiv+514 pp.
- MR0773093 (86k:14006)** Katz, Nicholas M. Expansion-coefficients as approximate solution of differential equations.  $p$ -adic cohomology. *Astérisque No. 119-120* (1984), 6, 183--189.
- MR0717592 (85c:14016)** Katz, Nicholas M. On the ubiquity of "pathology" in products. *Arithmetic and geometry, Vol. I*, 139--153, *Progr. Math.*, 35, Birkhäuser Boston, Boston, MA, 1983.
- MR0690013 (84f:57023c)** Browder, William; Katz, Nicholas M. Erratum: "Free actions of finite groups on varieties. II". *Math. Ann.* 262 (1983), no. 1, 144.
- MR0692111 (85f:14021)** Katz, Nicholas M. Wild ramification and some problems of "independence of  $\mathbb{F}_q$ ". *Amer. J. Math.* 105 (1983), no. 1, 201--227.
- MR0688039 (84h:14014b)** Katz, Nicholas M. Corrections to: "A conjecture in the arithmetic theory of differential equations". *Bull. Soc. Math. France* 110 (1982), no. 3, 347--348.
- MR0667751 (84h:14014a)** Katz, Nicholas M. A conjecture in the arithmetic theory of differential equations. *Bull. Soc. Math. France* 110 (1982), no. 2, 203--239.
- MR0686137 (84f:57023a)** Browder, William; Katz, Nicholas M. Free actions of finite groups on varieties. I. *Current trends in algebraic topology, Part 2 (London, Ont., 1981)*, pp. 23--33, *CMS Conf. Proc.*, 2, Amer. Math. Soc., Providence, R.I., 1982.
- MR0670189 (84f:57023b)** Browder, William; Katz, Nicholas M. Free actions of finite groups on varieties. II. *Math. Ann.* 260 (1982), no. 4, 403--412.
- MR0659153 (83k:14012)** Katz, Nicholas M.; Lang, Serge Finiteness theorems in geometric classfield theory. With an appendix by Kenneth A. Ribet. *Enseign. Math. (2)* 27 (1981), no. 3-4, 285--319 (1982).
- MR0638600 (83k:14039b)** Katz, N. Serre-Tate local moduli. *Algebraic surfaces (Orsay, 1976--78)*, pp. 138--202, *Lecture Notes in Math.*, 868, Springer, Berlin-New York, 1981.
- MR0638599 (83k:14039a)** Deligne, P. Cristaux ordinaires et coordonnées canoniques. (French) [Ordinary crystals and canonical coordinates] With the collaboration of L. Illusie. With an appendix by Nicholas M. Katz. *Lecture Notes in Math.*, 868, *Algebraic surfaces (Orsay, 1976--78)*, pp. 80--137, Springer, Berlin-New York, 1981.
- MR0656042 (83h:10067)** Katz, Nicholas M. Divisibilities, congruences, and Cartier duality. *J. Fac. Sci. Univ. Tokyo Sect. IA Math.* 28 (1981), no. 3, 667--678 (1982).
- MR0629129 (83e:14015)** Laumon, G. Majorations de sommes trigonométriques (d'après P. Deligne et N. Katz). (French) [Upper bounds of trigonometric sums (after P. Deligne and N. Katz)] *The Euler-Poincaré characteristic (French)*, pp. 221--258, *Astérisque*, 83--83, Soc. Math.

France, Paris, 1981.

**MR0633896 (83d:14012)** Katz, Nicholas M. Monodromy of families of curves: applications of some results of Davenport-Lewis. *Seminar on Number Theory, Paris 1979--80*, pp. 171--195, *Progr. Math.*, **12**, Birkhäuser, Boston, Mass., 1981.

**MR0633662 (83a:14022)** Katz, Nicholas M. Crystalline cohomology, Dieudonné modules, and Jacobi sums. *Automorphic forms, representation theory and arithmetic (Bombay, 1979)*, pp. 165--246, *Tata Inst. Fund. Res. Studies in Math.*, **10**, Tata Inst. Fundamental Res., Bombay, 1981.

**MR0611271 (82j:12020)** Katz, Nicholas M. Another look at  $p$ -adic  $L$ -functions for totally real fields. *Math. Ann.* **255** (1981), no. 1, 33--43.

**MR0604840 (82d:14025)** Katz, Nicholas M. Galois properties of torsion points on abelian varieties. *Invent. Math.* **62** (1981), no. 3, 481--502.

**MR0668433 (83j:01065)** Katz, Nicholas M.; Carleson, Lennart Fields Medals for 1978. (Bulgarian) Translated from the English by B. Penkov. *Fiz.-Mat. Spis. B\cdprime Igar. Akad. Nauk.* **23(56)** (1980/81), no. 3, 247--253.

**MR0617009 (82m:10059)** Katz, Nicholas M. Sommes exponentielles. (French) [Exponential sums] Course taught at the University of Paris, Orsay, Fall 1979. With a preface by Luc Illusie. Notes written by Gérard Laumon. With an English summary. *Astérisque*, **79**. Société Mathématique de France, Paris, 1980. 209 pp.

**MR0562594 (82g:01060)** Katz, N. M. The work of Pierre Deligne. *Proceedings of the International Congress of Mathematicians (Helsinki, 1978)*, pp. 47--52, *Acad. Sci. Fennica, Helsinki*, 1980

**MR0562628 (81d:12012)** Katz, Nicholas M.  $p$ -adic  $L$ -functions, Serre-Tate local moduli, and ratios of solutions of differential equations. *Proceedings of the International Congress of Mathematicians (Helsinki, 1978)*, pp. 365--371, *Acad. Sci. Fennica, Helsinki*, 1980.

**MR0563463 (81i:14014)** Katz, Nicholas M. Slope filtration of  $F$ -crystals. *Journées de Géométrie Algébrique de Rennes (Rennes, 1978), Vol. I*, pp. 113--163, *Astérisque*, **63**, Soc. Math. France, Paris, 1979.

**MR0513095 (80h:10039)** Katz, Nicholas M.  $p$ -adic  $L$ -functions for CM fields. *Invent. Math.* **49** (1978), no. 3, 199--297.

**MR0485797 (58 #5602)** Katz, Nicholas M. The Eisenstein measure and  $p$ -adic interpolation. *Amer. J. Math.* **99** (1977), no. 2, 238--311.

**MR0463169 (57 #3127)** Katz, Nicholas M. A result on modular forms in characteristic  $p$ . *Modular functions of one variable, V (Proc. Second Internat. Conf., Univ. Bonn, Bonn, 1976)*, pp. 53--61. Lecture Notes in Math., Vol. 601, Springer, Berlin, 1977.

**MR0441928 (56 #319)** Katz, Nicholas M. Formal groups and  $p$ -adic interpolation. *Journées Arithmétiques de Caen (Univ. Caen, Caen, 1976)*, pp 55--65. Asterisque No. 41--42, Soc. Math. France, Paris, 1977.

**MR0506271 (58 #22071)** Katz, Nicholas M.  $p$ -adic interpolation of real analytic Eisenstein series. *Ann. of Math. (2)* **104** (1976), no. 3, 459--571.

**MR0432640 (55 #5627)** Katz, Nicholas M. An overview of Deligne's work on Hilbert's twenty-first problem. *Mathematical developments arising from Hilbert problems (Proc. Sympos. Pure Math., Vol. XXVIII, Northern Illinois Univ., De Kalb, Ill., 1974)*, pp. 537--557. *Amer. Math. Soc.*,

Providence, R. I., 1976.

**MR0424822 (54 #12780)** Katz, Nicholas M. An overview of Deligne's proof of the Riemann hypothesis for varieties over finite fields. *Mathematical developments arising from Hilbert problems (Proc. Sympos. Pure Math., Vol. XXVIII, Northern Illinois Univ., De Kalb, Ill., 1974)*, pp. 275--305. Amer. Math. Soc., Providence, R.I., 1976.

**MR0432649 (55 #5635)** Katz, Nicholas M.  $p$ -adic  $L$ -functions via moduli of elliptic curves. *Algebraic geometry (Proc. Sympos. Pure Math., Vol. 29, Humboldt State Univ., Arcata, Calif., 1974)*, pp. 479--506. Amer. Math. Soc., Providence, R. I., 1975.

**MR0417059 (54 #5120)** Katz, Nicholas M. Higher congruences between modular forms. *Ann. of Math. (2)* **101** (1975), 332--367.

**MR0387293 (52 #8136)** Katz, Nicholas M. The congruences of Clausen-von Staudt and Kummer for Bernoulli-Hurwitz numbers. *Math. Ann.* **216** (1975), 1--4.

**MR0360085 (50 #12535)** {\cyr Matematika: Periodicheski\u\i sbornik perevodov inostrannykh state\u\i. Tom} 18 (1974), {\cyr vyp.} 6. (Russian) [Mathematics: Periodical collection of translations of foreign articles. Vol. 18 (1974), no. 6] *Izdat. ``Mir''*, Moscow, 1974. 158 pp.

**MR0332791 (48 #11117)** Katz, Nicholas M.; Messing, William Some consequences of the Riemann hypothesis for varieties over finite fields. *Invent. Math.* **23** (1974), 73--77.

**MR0498577 (58 #16672)** Katz, Nicholas Travaux de Dwork. (French) *Séminaire Bourbaki, 24ème année (1971/1972), Exp. No. 409*, pp. 167--200. Lecture Notes in Math., Vol. 317, Springer, Berlin, 1973.

**MR0472820 (57 #12510)** Katz, Nicholas M. A theorem on the De Rham cohomology of a hypersurface. *Symposia Mathematica, Vol. XI (Convegno di Geometria, INDAM, Rome, 1972)*, pp. 285--297. Academic Press, London, 1973.

**MR0447119 (56 #5434)** Katz, Nicholas M.  $p$ -adic properties of modular schemes and modular forms. *Modular functions of one variable, III (Proc. Internat. Summer School, Univ. Antwerp, Antwerp, 1972)*, pp. 69--190. Lecture Notes in Mathematics, Vol. 350, Springer, Berlin, 1973.

**MR0354657 (50 #7135)** Groupes de monodromie en géométrie algébrique. II. (French) Séminaire de Géométrie Algébrique du Bois-Marie 1967--1969 (SGA 7 II). Dirigé par P. Deligne et N. Katz. Lecture Notes in Mathematics, Vol. 340. Springer-Verlag, Berlin-New York, 1973. x +438 pp.

**MR0337959 (49 #2728)** Katz, Nicholas M. Algebraic solutions of differential equations ( $p$ -curvature and the Hodge filtration). *Invent. Math.* **18** (1972), 1--118.

**MR0472822 (57 #12512)** Katz, Nicholas M. The regularity theorem in algebraic geometry. *Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 1*, pp. 437--443. Gauthier-Villars, Paris, 1971.

**MR0360595 (50 #13043)** Katz, Nicholas M. Introduction aux travaux récents de Dwork. (French) *Number Theory Institute (Proc. Sympos. Pure Math., Vol. XX, State Univ. New York, Stony Brook, N.Y., 1969)*, pp. 65--75. Amer. Math. Soc., Providence, R.I., 1971.

**MR0288099 (44 #5297)** Katz, Nicholas M. On a theorem of Ax. *Amer. J. Math.* **93** 1971 485--499.

**MR0291177 (45 #271)** Katz, Nicholas M. Nilpotent connections and the monodromy theorem: Applications of a result of Turrittin. *Inst. Hautes Études Sci. Publ. Math.* No. 39 (1970),

175--232.

**MR0276246 (43 #1993)** Katz, Nicholas M. On the intersection matrix of a hypersurface. *Ann. Sci. École Norm. Sup. (4)* **2** 1969 583--598.

**MR0242841 (39 #4168)** Katz, Nicholas M. On the differential equations satisfied by period matrices. *Inst. Hautes Études Sci. Publ. Math.* No. 35 1968 223--258.

**MR0237510 (38 #5792)** Katz, Nicholas M.; Oda, Tadao On the differentiation of de Rham cohomology classes with respect to parameters. *J. Math. Kyoto Univ.* **8** 1968 199--213.