

Work on Moduli and Geometric Invariant Theory (except Abelian Varieties)

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- Topics in the Theory of Moduli, (published in Japanese), *Sugaku*, 1963. [Scanned English manuscript](#)
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- The Boundary of Moduli Schemes, mimeographed notes from the 1964 Woods Hole Symposium on Algebraic Geometry. [Scanned manuscript](#)
- Picard Groups of Moduli Problems, in *Arithmetic Algebraic Geometry*, (Proceedings of a Conference in Purdue, 1963), Harper and Row, 1965. [Scanned reprint](#)
- Two Fundamental Theorem on Deformations of Polarized Varieties (with T. Matsusaka), *Amer. J. of Math.*, 1964, pp. 668-684. [Scanned reprint](#) and [DASH reprint](#)
- *Geometric Invariant Theory*, Springer-Verlag, 1965; 2nd enlarged edition, (with John Fogarty), 1982; 3rd enlarged edition, (with Frances Kirwan and John Fogarty), 1994, [DejaVu](#)
- Abelian Quotients of the Teichmuller Modular Group, *Journal d'Analyse*, 1967, **28**, pp. 227-244. [Scanned reprint](#)
- Periods of Moduli Spaces of Bundles on Curves (with P. Newstead), *Amer. J. of Math.*, 1968, **90**, pp. 1200-1208. [Scanned reprint](#) and [DASH reprint](#)
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- A Remark on Mahler's Compactness Theorem, *Proc. Amer. Math. Soc.*, 1971, **28**, pp. 289-194. [Scanned reprint](#) and [DASH reprint](#)
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- Stability of Projective Varieties, Monographie No. 24 de *L'Enseignement Math.*, **23**, 1977, pp. 39-110. [Scanned reprint](#)
- On the Kodaira Dimension of the Moduli Space of Curves (with Joe Harris and an appendix by William Fulton), *Inv. Math.*, 1982, pp. 23-88. [Scanned reprint](#) and [DASH reprint](#)
- Towards an Enumerative Geometry of Moduli Space of Curves, in *Arithmetic and Geometry*, edited by M. Artin, J. Tate, Birkhauser-Boston, 1983, pp. 271-326. [Scanned reprint](#)
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- Families of Abelian Varieties, in *Proc. of Symposium in Pure Math.*, **9**, Amer. Math. Soc., 1966. [Scanned reprint](#)
- Abstract Theta Functions, mimeographed notes of lectures delivered at the Bowdoin Summer School, 1967. [Scanned manuscript](#)

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- Bi-extensions of Formal Groups, in *Algebraic Geometry*, Oxford University Press, 1969, pp. 307-322. [Scanned reprint](#)
- A Note on Shimura's paper "Discontinuous Groups and Abelian Varieties", *Math. Annalen*, 1969, **181**, pp. 345-351. [Scanned reprint](#) and [DASH reprint](#)
- *Abelian Varieties*, (with C. P. Ramanujam), Oxford University Press India, based on lectures at the Tata Institute in 1967-68 1st edition 1970; 2nd edition 1974, enlarged, with contributions from Yuri Manin; 3rd edition 2010 republished by the Tata Institute of Fundamental Research and distributed by the American Math Society.
- An Analytic Construction of Degenerating Abelian Varieties over Complete Rings, *Composito Math.*, 1972, **24**, pp. 239-272. [Scanned reprint](#)
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- *Toroidal Embeddings I* (with George Kempf, Finn Knudsen and Bernard Saint-Donat), Lecture Notes in Mathematics 339, Springer-Verlag 1973.
- *Smooth Compactifications of Locally Symmetric Varieties* (with Avner Ash, Michael Rapoport, Yung-Shen Tai), Lie Groups: History Frontiers and Applications, Vol. 4, Math. Sci. Press (a do-it-yourself press run by Bob Hermann) 1975, reprinted by Cambridge University Press, 2010. This is a continuation of the previous paper and book, applying that theory in particular to moduli of abelian varieties.
- Hirzebruch's Proportionality Theorem in the non-compact case, *Invent. Math.*, 1977, **42**, pp. 239-272. [Scanned reprint](#) and [DASH reprint](#)
- *Tata Lectures on Theta* (with C. Musili, Madhav Nori, Peter Norman, Emma Previato and Michael Stillman), Birkhauser-Boston, Part I, 1982, Part II, 1983, Part III, 1991, based on lectures given at the Tata Institute in 1978-79, [I](#), [II](#), [III](#)
- On the Kodaira Dimension of the Siegel Modular Variety, in *Algebraic Geometry - Open Problems*, (Ravello, 1982), *Lecture Notes in Mathematics* 997, Springer-Verlag 1983, pp.348-375. [Scanned manuscript](#)

Work on Curves and Surfaces

- Topology of Normal Singularities and a Criterion for Simplicity, *Publ. de l'Institut des Hautes Etudes Scientifiques*, 1961, pp. 5-22. [Scanned reprint](#) and [DASH reprint](#)
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- Theta Characteristics of an Algebraic Curve, *Annales de l'Ecole Norm. Sup.*, 1971, pp. 181-192. [Scanned reprint](#) and [DASH reprint](#)
- An Analytic Construction of Degenerating Curves Over Complete Local Rings, *Composito Math.*, 1972, **24**, pp. 129-174. [Scanned reprint](#)
- Prym Varieties I, in *Contributions to Analysis*, Academic Press, 1974, pp. 325-350. [Scanned reprint](#)
- *Curves and their Jacobians*, University of Michigan Press, 1975, reprinted as part of the 'Red Book', 1999.

Work on Surprising Examples

- Pathologies of Modular Geometry, *Amer. J. of Math.*, 1961, pp. 339-342. [Scanned reprint](#) and [DASH reprint](#)
- Further Pathologies in Algebraic Geometry, *Amer. J. of Math.*, 1962, pp. 642-648. [Scanned reprint](#) and [DASH reprint](#)
- Pathologies III, *Amer. J. of Math.*, 1967, **89**, pp. 94-104. [Scanned reprint](#) and [DASH reprint](#)
- A Remark on the paper of M. Schlessinger, in *Complex Analysis*, 1972, Rice University Studies, **59**, 1973, pp. 113-117. This paper constructs examples of singularities which cannot be deformed away. [Scanned reprint](#)
- Some Elementary Examples of Unirational Varieties which are not Rational (with M. Artin), *J. London Math. Soc.*, 1972, **25**, pp. 75-95. Also published by request in *Accad. Naz. dei Lincei*, 1973. [Scanned reprint](#)
- Pathologies IV, *Amer. J. of Math.*, 1975, **97**, pp. 847-849. [Scanned reprint](#) and [DASH reprint](#)
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Diverse Topics in Algebraic Geometry

- A Remark on Mordell's Conjecture, *Amer. J. of Math.*, 1965, pp. 1007-1016. [Scanned reprint](#) and [DASH reprint](#)
- Varieties Defined by Quadratic Equations, in *Questions on Algebraic Varieties*, C.I.M.E. (Centro Internazionale Matematico Estivo), 1969, publ. by Editioni Cremonese, 1970. [Scanned manuscript](#)
- The Self-Intersection Formula and the "Formule-Clef" (with A.T. Lascu and D.B. Scott), *Math. Proc. Camb. Phil. Soc.*, 1975, **78**, pp. 117-123. [Scanned reprint](#)
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- What can be Computed in Algebraic Geometry? (with Dave Bayer), in *Computational Algebraic Geometry and Commutative Algebra*, ed. D.Eisenbud and L.Robbiano, Camb. Univ. Press, 1993, pp. 1-48. [Scanned reprint](#)