**Bibliography Phillip A. Griffiths** updated 05/03/2017

## **Books**

(with J. Adams) Topics in algebraic and analytic geometry. Princeton University Press, 1974, vi+219 pp.

Entire holomorphic mappings in one and several complex variables. Princeton University Press, 1976, x+99 pp.

(with J. Harris) *Principles of algebraic geometry*. Pure and Applied Mathematics. John Wiley & Sons, New York, 1978, xii+813 pp.

An introduction to the theory of special divisors on algebraic curves. CBMS Regional Conference Series in Mathematics, 44. American Mathematical Society, Providence, R.I., 1980, v+25 pp.

(with J. Morgan) *Rational homotopy theory and differential forms*. Progress in Mathematics, 16. Birkhäuser, Boston, Mass., 1981, xi+242 pp.

(with E. Arbarello, M. Cornalba and J. Harris) *Geometry of algebraic curves*. Vol. I. Grundlehren der Mathematischen Wissenschaften [Fundamental Principles of Mathematical Science], 267. Springer-Verlag, New York-Berlin, 1985, xvi+386 pp.

(with G. Jensen) *Differential systems and isometric embeddings*. Annals of Mathematics Studies, 114. The William H. Roever Lectures in Geometry. Princeton University Press, 1987, xii+226 pp.

*Introduction to algebraic curves*. Translated from the Chinese by Kuniko Weltin. Translations of Mathematical Monographs, 76. American Mathematical Society, Providence, RI, 1989, x+221 pp.

(with R. Bryant, S.S. Chern, R Gardner, H. Goldschmidt) *Exterior differential systems*. Mathematical Sciences Research Institute Publications, 18. Springer-Verlag, New York, 1991, viii+475 pp.

(with R. Bryant and D. Grossman) *Exterior differential systems and Euler-Lagrange partial differential equations*. University of Chicago Press, 2003, vii+213 pp.

The Selected Works of Phillip A. Griffiths with Commentary. Providence, R.I.: American Mathematical Society, 2003, 4 v.

(with M. Green) *On the tangent space to the space of algebraic cycles on a smooth algebraic variety* (Annals of Math Studies, 157. Princeton University Press, Princeton, NJ, 2005, vi+200 pp. ISBN: 0-681-12044-7.

(with E. Arbarello, M. Cornalba) *Geometry of algebraic curves*. Vol II, Fundamental Principles of Mathematical Sciences, 268, Springer, Heidelberg, 2011.

(with M.Green and M. Kerr) *Mumford-Tate Groups and Domains: Their Geometry and Arithmetic*, Annals of Mathematics Studies, Princeton University Press, Vol 183, 2012.

(with M. Green and M. Kerr) *Hodge Theory, Complex Geometry, and Representation Theory,* Regional Conference Series in Mathematics, No 118, AMS, 2013.

(with J. Morgan) *Rational Homotopy Theory and Differential Forms*, Series: Progress in Math Vol 16, 2<sup>nd</sup> edition, Birkhauser Basel 2013.

(with E. Cattani, F. El Zein and L.D. Tráng) Hodge Theory, Princeton University Press, 2014.

(with M. Green and C. Robles) *Hodge Theory and*  $L^2$ -*Analysis*, Higher Education Press and International Press, summer 2017.

## **Papers**

On a theorem of Chern, Illinois J. Math. 6 (1962) 468-479.

On certain homogeneous complex manifolds. Proc. Nat. Acad. Sci. U.S.A. 48 (1962) 780-783.

Some geometric and analytic properties of homogeneous complex manifolds, I. Sheaves and cohomology. Acta Math. 110 (1963) 115-155.

Some geometric and analytic properties of homogeneous complex manifolds. II. Deformation and bundle theory. Acta Math. 110 (1963) 157-208.

On the differential geometry of homogeneous vector bundles. Trans. Amer. Math. Soc. 109 (1963) 1-34.

Some remarks of automorphisms, analytic bundles, and embeddings of complex algebraic varieties. Proc. Nat. Acad. Sci. U.S.A. 49 (1963) 817-820.

(with J.A. Wolf) Complete maps and differentiable coverings. Michigan Math. J. 10 (1963) 253-255.

Deformations of G-structures, Part A: General theory of deformations. Math. Ann. 155 (1964) 292-315.

On the theory of variation of structures defined by transitive, continuous pseudogroups. Osaka J. Math. 1 (1964) 175-199.

Deformations of holomorphic mappings. Illinois J. Math. 8 (1964) 139-151.

*The extension problem for compact submanifolds of complex manifolds, I. The case of a trivial normal bundle.* Proc. Conf. Complex Analysis (Minneapolis) (1964) 113-142.

*Hermitian differential geometry and the theory of positive and ample holomorphic vector bundles.* J. Math. Mech. 14 (1965) 117-140.

Deformations of G-structures, Part B: Deformations of geometric G-structures. Math. Ann. 158 (1965) 326-351.

On the existence of a locally complete germ of deformation of certain G-structures. Math. Ann. 159 (1965) 151-171.

*The extension problem in complex analysis, II. Embeddings with positive normal bundle.* Amer. J. Math. 88 (1966) 366-446.

*The residue calculus and some transcendental results in algebraic geometry*, I. Proc. Nat. Acad. Sci. U.S.A. 55 (1966) 1303-1309.

*The residue calculus and some transcendental results in algebraic geometry*, II. Proc. Nat. Acad. Sci. U.S.A. 55 (1966) 1392-1395.

Some results on locally homogeneous complex manifolds. Proc. Nat. Acad. Sci. U.S.A. 56 (1966) 413-416.

Some remarks and examples on continuous systems and moduli. J. Math. Mech. 16 (1967) 789-802.

*Periods of integrals on algebraic manifolds, I. Construction and properties of the modular varieties.* Amer. J. Math. 90 (1968) 568-626.

Periods of integrals on algebraic manifolds, II. Local study of the period mapping. Amer. J. Math. 90 (1968) 805-865.

*Some results on algebraic cycles on algebraic manifolds.* Proceedings of the International Conference on Algebraic Geometry, Tata Institute (Bombay) (1968) 93-191 Oxford Univ. Press, London.

On the periods of integrals on algebraic manifolds. Rice Univ. Studies 54 no. 4 (1968) 21-38.

On the periods of certain rational integrals, I, II. Ann. Math. (2) 90 (1969) 460-495 and 496-541.

(with W. Schmid) Locally homogeneous complex manifolds. Acta Math. 123 (1969) 253-302.

Hermitian differential geometry, Chern classes, and positive vector bundles. Global Analysis (Papers in Honor of K. Kodaira) (1969) 185-251 Univ. Tokyo Press, Tokyo.

Deformation of complex structures. (Russian) Uspehi Mat. Nauk 24 (1969) no. 4 (148) 153-176.

Seminar on Degeneration of Algebraic Varieties. Lecture 1: Some background and generalities. Institute for Advanced Study (1969) 1-5.

*Deformation of complex structures.* (1970) Global Analysis (Proc. Sympos. Pure Math., Vol. XV, Berkeley, Calif., 1968) 251-273 Amer. Math. Soc., Providence, R.I.

*Periods of integrals on algebraic manifolds, III. Some global differential-geometric properties of the period mapping.* Inst. Hautes Études Sci. Publ. Math. No. 38 (1970) 125-180.

*Periods of integrals on algebraic manifolds: Summary of main results and discussion of open problems.* Bull. Amer. Math. Soc. 76 (1970) 228-296.

A theorem on periods of integrals of algebraic manifolds. Rice Univ. Studies 56 (1970) no. 2, 143-152 (1971).

*A transcendental method in algebraic geometry*. Actes du Congrès International des Mathématiciens (Nice, 1970) Tome 1, 113-119. Gauthier-Villars, Paris, 1971.

*Some transcendental methods in the study of algebraic cycles.* Several complex variables, II (Proc. Internat. Conf., Univ. Maryland, College Park, Md.) (1970) 1-46. Lecture Notes in Math., Vol. 185, Springer, Berlin, 1971.

Two theorems on extensions of holomorphic mappings. Invent. Math. 14 (1971) 27-62.

Complex-analytic properties of certain Zariski open sets on algebraic varieties. Ann. of Math. (2) 94 (1971) 21-51.

Holomorphic mappings into canonical algebraic varieties. Ann. of Math. (2) 93 (1971) 439-458.

Function theory of finite order on algebraic varieties. I(A). J. Differential Geometry 6 (1971/72) 285-306.

Function theory of finite order on algebraic varieties. I(B) J. Differential Geometry 7 (1972) 45-66.

(with J. Carlson) A defect relation for equidimensional holomorphic mappings between algebraic varieties. Ann. of Math. (2) 95 (1972) 557-584.

(with C. Clemens) The intermediate Jacobian of the cubic threefold. Ann. of Math. (2) 95 (1972) 281-356.

Holomorphic mappings: Survey of some results and discussion of open problems. Bull. Amer. Math. Soc. 78 (1972) 374-382.

A Schottky-Landau theorem for holomorphic mappings in several complex variables. Symposia Mathematica, Vol.

X (Convegno di Geometria Differenziale, INDAM, Rome, 1971) 229-243. Academic Press, London, 1972.

(with J. King) Nevanlinna theory and holomorphic mappings between algebraic varieties. Acta Math. 130 (1973) 145-220.

*Two results in the global theory of holomorphic mappings*. Contributions to analysis (a collection of papers dedicated to Lipman Bers) 169-183. Academic Press, New York, 1974.

(with J. Carlson) *The order functions for entire holomorphic mappings. Value distribution theory, Part A* (Proc. Tulane Univ. Program, 1972-1973) 225-248. Dekker, New York, 1974.

Some remarks on Nevanlinna theory. Value distribution theory (Proc. Tulane Univ. Program, Tulane Univ., New Orleans, La., 1972-1973) Part A, 1-11. Dekker, New York, 1974.

On the Bezout problem for entire analytic sets. Ann. of Math. (2) 100 (1974) 533-552.

*On Cartan's method of Lie groups and moving frames as applied to uniqueness and existence questions in differential geometry.* Duke Math. J. 41 (1974) 775-814.

(with W. Schmid) *Recent developments in Hodge theory: a discussion of techniques and results.* Discrete subgroups of Lie groups and applicatons to moduli (Internat. Colloq., Bombay, 1973) 31-127. Oxford Univ. Press, Bombay, 1975.

*Differential geometry and complex analysis.* Differential geometry (Proc. Sympos. Pure Math., Vol. XXVII, Part 2, Stanford Univ., Stanford, Calif., 1973) 43-64. Amer. Math. Soc., Providence, R.I., 1975.

(with M. Cornalba) Analytic cycles and vector bundles on non-compact algebraic varieties. Invent. Math. 28 (1975) 1-106.

(with M. Cornalba) *Some transcendental aspects of algebraic geometry*. Algebraic geometry (Proc. Sympos. Pure Math., Vol. 29, Humboldt State Univ., Arcata, Calif., 1974) 3-110. Amer. Math. Soc., Providence, R.I., 1975.

(with P. Deligne, J. Morgan and D. Sullivan) *Real homotopy theory of Kähler manifolds*. Invent. Math. 29 (1975) no. 3, 245-274.

(with M. Cowen) Holomorphic curves and metrics of negative curvature. J. Analyse Math. 29 (1976) 93-153.

Variations on a theorem of Abel. Invent. Math. 35 (1976) 321-390.

*On Abel's differential equations*. Algebraic geometry (J. J. Sylvester Sympos., Johns Hopkins Univ., Baltimore, Md., 1976) 26-51. Johns Hopkins Univ. Press, Baltimore, Md., 1977.

(with J. Harris) A Poncelet theorem in space. Comment. Math. Helv. 52 (1977) no. 2, 145-160.

(with J. Harris) *Two proofs of a theorem concerning algebraic space curves*. Proceedings of the Eighth National Mathematics Conference (Arya-Mehr Univ. Tech., Tehran, 1977) 350-370, Arya-Mehr Univ. Tech., Tehran, 1977.

(with S.S. Chern) *Linearization of webs of codimension one and maximum rank*. Proceedings of the International Symposium on Algebraic Geometry (Kyoto Univ., Kyoto, 1977) 85-91, Kinokuniya Book Store, Tokyo, 1978.

(with J. Harris) Residues and zero-cycles on algebraic varieties. Ann. of Math. (2) 108 (1978) no. 3, 461-505.

(with S.S. Chern) Abel's theorem and webs. Jahresber. Deutsch. Math.-Verein. 80 (1978) no. 1-2, 13-110.

(with J. Harris) On Cayley's explicit solution to Poncelet's porism. Enseign. Math. (2) 24 (1978) no. 1-2, 31-40.

*Complex differential and integral geometry and curvature integrals associated to singularities of complex analytic varieties.* Duke Math. J. 45 (1978) no. 3, 427-512.

(with S.S. Chern) *An inequality for the rank of a web and webs of maximum rank*. Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4) 5 (1978) no. 3, 539-557.

A theorem concerning the differential equations satisfied by normal functions associated to algebraic cycles. Amer. J. Math. 101 (1979) no. 1, 94-131.

Complex analysis and algebraic geometry. Bull. Amer. Math. Soc. (N.S.) 1 (1979) no. 4, 595-626.

(with J. Harris) Algebraic geometry and local differential geometry. Ann. Sci. École Norm. Sup. (4) 12 (1979) no. 3, 355-452.

Die Geometrie in der zeitgenossischen Mathematik, Jahrbuch / Akademie der Wissenschaften in Gottingen, Vandenhoeck & Ruprecht in Gottingen (1979).

Some problems in complex analytic geometry with growth conditions. Proceedings of the International Congress of Mathematicians (Helsinki, 1978) 645-651, Acad. Sci. Fennica, Helsinki, 1980.

(with J. Harris) On the variety of special linear systems on a general algebraic curve. Duke Math. J. 47 (1980) no. 1, 233-272.

(with M. Green) *Two applications of algebraic geometry to entire holomorphic mappings*. The Chern Symposium 1979 (Proc. Internat. Sympos., Berkeley, Calif., 1979) 41-74, Springer, New York-Berlin, 1980.

(with J.A. Carlson) *Infinitesimal variations of Hodge structure and the global Torelli problem*. Journées de Géometrie Algébrique d'Angers, Juillet 1979/Algebraic Geometry, Angers, 1979, 51-76, Sijthoff & Noordhoff, Alphen aan den Rijn--Germantown, Md., 1980.

An infinitesimal invariant for normal functions, Daisu Shinpojiumu Hokokushui, Proceedings of the algebrais Symposium, Kanron oyobi Daisukikagaku, Ring Theory and Algebraic Geometrictry, Hyogo-ken Kyoiku Kaikan, Hyogo Prefecture Educational Hall, Nihon Sugaku Kai Japan Mathematical Society (1980) 277-309.

(with R. Donagi) Neron models for general normal functions (unpublished notes, 1980).

(with S.S. Chern) *Corrections and addenda to our paper: "Abel's theorem and webs"* [Jahresber. Deutsch. Math.-Verein. {80} (1978) no. 1-2, 13-110; MR 80b:53008]. Jahresber. Deutsch. Math.-Verein. 83 (1981) no. 2, 78-83.

An observation on normal functions. Symposia Mathematica, Vol. XXIV (Sympos., INDAM, Rome, 1979) 347-353, Academic Press, London-New York, 1981.

(with E. Berger and R. Bryant) *Some isometric embedding and rigidity results for Riemannian manifolds*. Proc. Nat. Acad. Sci. U.S.A. 78 (1981) no. 8, part 1, 4657-4660.

(with R. Bryant and S.S. Chern) *Exterior differential systems*. Proceedings of the 1980 Beijing Symposium on Differential Geometry and Differential Equations, Vol. 1, 2, 3 (Beijing, 1980) 219-338, Science Press, Beijing, 1982.

(with S.S. Chern) *Pfaffian Systems in Involution*, Proceedings of the 1982 Beijing Symposium on Differential Geometry and Differential Equations.

Poincaré and algebraic geometry. Bull. Amer. Math. Soc. (N.S.) 6 (1982) no. 2, 147-159.

(with J. Carlson, M. Green and J. Harris) *Infinitesimal variations of Hodge structure*. I. Compositio Math. 50 (1983) no. 2-3, 109-205.

(with J. Harris) *Infinitesimal variations of Hodge structure, II. An infinitesimal invariant of Hodge classes.* Compositio Math. 50 (1983) no. 2-3, 207-265.

Infinitesimal variations of Hodge structure. III. Determinantal varieties and the infinitesimal invariant of normal functions. Compositio Math. 50 (1983) no. 2-3, 267-324.

(with E. Berger and R. Bryant) *The Gauss equations and rigidity of isometric embeddings*. Duke Math. J. 50 (1983) no. 3, 803-892.

(with R. Bryant and D. Yang) *Characteristics and existence of isometric embeddings*. Duke Math. J. 50 (1983) no. 4, 893-994.

(with R. Bryant) *Some observations on the infinitesimal period relations for regular threefolds with trivial canonical bundle.* Arithmetic and geometry, Vol. II, 77-102, Progr. Math., 36, Birkhäuser Boston, Boston, Mass. (1983).

*Linearizing flows and a cohomology interpretation of Lax equations*. Seminar on nonlinear partial differential equations (Berkeley, Calif., 1983) 37-46, Math. Sci. Res. Inst. Publ., 2, Springer, New York-Berlin, (1984).

(with L. Tu) Variation of Hodge structure. Topics in transcendental algebraic geometry (Princeton, N.J., 1981/1982) 3-28, Ann. of Math. Stud., 106, Princeton Univ. Press, Princeton, NJ, 1984.

(with L. Tu) *Curvature properties of the Hodge bundles*. Topics in transcendental algebraic geometry (Princeton, N.J., 1981/1982) 29-49, Ann. of Math. Stud., 106, Princeton Univ. Press, Princeton, NJ, 1984.

(with L. Tu) *Infinitesimal variation of Hodge structure*. Topics in transcendental algebraic geometry (Princeton, N.J., 1981/1982) 51-61, Ann. of Math. Stud., 106, Princeton Univ. Press, Princeton, NJ, 1984.

(with L. Tu) *Asymptotic behavior of a variation of Hodge structure*. Topics in transcendental algebraic geometry (Princeton, N.J., 1981/1982) 63-74, Ann. of Math. Stud., 106, Princeton Univ. Press, Princeton, NJ, 1984.

(with L. Tu) *Infinitesimal variation of Hodge structure and the generic global Torelli theorem*. Topics in transcendental algebraic geometry (Princeton, N.J., 1981/1982) 227-237, Ann. of Math. Stud., 106, Princeton Univ. Press, Princeton, NJ, 1984.

*Infinitesimal invariant of normal functions.* Topics in transcendental algebraic geometry (Princeton, N.J., 1981/1982) 305-316, Ann. of Math. Stud., 106, Princeton Univ. Press, Princeton, NJ, 1984.

(with J. Harris) On the Noether-Lefschetz theorem and some remarks on codimension-two cycles. Math. Ann. 271 (1985) no. 1, 31-51.

(with R. Bryant) Reduction for constrained variational problems and  $\int \kappa^2/2 \, ds$ . Amer. J. Math. 108 (1986) no. 3, 525-570.

*Linearizing flows and a cohomological interpretation of Lax equations.* Amer. J. Math. 107 (1985) no. 6, 1445-1484 (1986).

Some aspects of exterior differential systems. Complex geometry and Lie theory. (Sundance, UT, 1989) 151-173, Proc. Sympos. Pure Math., 53, Amer. Math. Soc., Providence, RI, (1991).

*S. S. Chern: always changing, always the same.* Chern–a great geometer of the twentieth century, 117-120, Internat. Press, Hong Kong, 1992.

(with R. Bryant) Characteristic cohomology of differential systems, I. General theory. J. Amer. Math. Soc. 8 (1995) no. 3, 507-596.

(with R. Bryant) Characteristic cohomology of differential systems, II. Conservation laws for a class of parabolic equations. Duke Math. J. 78 (1995) no. 3, 531-676.

(with R. Bryant and L. Hsu) *Hyperbolic exterior differential systems and their conservation laws*. I. Selecta Math. (N.S.) 1 (1995) no. 1, 21-112.

(with R. Bryant and L. Hsu) *Hyperbolic exterior differential systems and their conservation laws*. II. Selecta Math. (N.S.) 1 (1995) no. 2, 265-323.

(with R. Bryant and L. Hsu) *Toward a geometry of differential equations*. Geometry, Topology, & Physics, for Raoul Bott, edited by S.-T. Yau, International Press, Boston (1995) 1-76.

A classical complex analyst encounters a post-modern mathematical object. Boletín de la Asociación Matemática Venezolana VIII (2001) no. 2, 183-195.

(with M. Green) Abel's differential equations, Houston J. Math. 28 (2002) no. 2, 329-351.

(with M. Green) The regulator map for a general curve. Contemporary Math. 312 (2002) 117-127.

(with M. Green) An interesting 0-cycle, Duke Math Journal 119, No. 2, 203, 261-313.

(with M. Green) *Hodge theoretic invariants of algebraic cycles*, International Mathematical Research Notices, 9 (2003), 477-510.

(with M. Green and K. Paranjape) *Cycles over fields of transcendence degree one*, Michigan Math. J. 52 (2004), 181-187.

*Hodge Theory and Geometry*, Bulletin of the London Mathematical Society, vol. 36, (November 2004), no. 6, 721-757.

(with R. Bryant and D. Grossman) *Exterior differential systems and Euler-Lagrange partial differential equations*, Uni. Chicago Press (2004)

(with M. Green) *Formal deformation of Chow groups*, The legacy of Niels Henrik Abel, Springer, Berlin (2004), 467-509.

The legacy of Abel in algebraic geometry, The legacy of Niels Henrik Abel, Springer, Berlin (2004), 179-206.

(with M. Green) Algebraic cycles and singularities of normal functions II, Inspired by S.S. Chern, Nankai Tracts Math., 11, World Sci. Publ., Hackensack, NJ (2006), 179-268.

(with M. Green) Algebraic cycles and singularities of normal functions I, Algebraic Cycles and Motives, LMS Lecture Note Series no. 343 (2007), 206-263.

(with M. Green and M. Kerr) Néron models and boundary components for degenerations of Hodge structure of mirror quintic type, Contemporary Mathematics, 465, (2008),71-145.

(with J. Carlson) What is a period domain?, Notices of the AMS, 55, No. 11, (2008) 1418-1419.

(with J. Carlson and M. Green) Variations of Hodge structure considered as an exterior differential system: old and new results, SIGMA, 5 (2009).

(with M. Green and M. Kerr) *Some enumerative global properties of variations of Hodge structure,* Moscow Math. No. 9, (2009), 469-530.

*Singularities of admissable normal function*, Cycles, motives and Shimura varieties, Tata Inst. Fund. Res. Stud. Math., Tata Inst. Fund. Res., Mumbai, (2010), 101-129.

(with M. Green and M. Kerr) Néron models and limits of Abel-Jacobi mappings. Compos. Math. 146 No 2. (2010), 288–366.

(with M. Green) *Correspondence and cycle spaces: A result comparing their cohomologies*, Clay Mathematics Proceedings 18 (2013) 329-360.

(with C. Robles and D. Toledo) *Quotients of non-classical flag domains are not algebraic*, Algebraic Geometry 1 (2014), 1-13.

(with M. Green and M. Kerr) *Special values of automorphic cohomology classes*, Memoirs of the AMS, Vol 231, No 1088, (2014).

(with M. Green, C. Robles) *Extremal degenerations of polarized Hodge structures*, Hodge Theory and L<sup>2</sup> analysis, ALM 39, 319-374 (2014).

(with M. Green) *Deformation theory and limiting mixed Hodge structures*, London Math Sci Lecture Notes 427, Cambridge Univ Press, (2016) 88-133.