

List of Representative Publications

Ngaiming Mok

32. (with S.-Y. Kim & A.Seo) Proper holomorphic maps between bounded symmetric domains with small rank differences,, *J. Differential Geom.* **131** (2025), 551-631.
31. (with K.-K. Wong) Extension of inverses of Γ -equivariant holomorphic embeddings of bounded symmetric domains of rank ≥ 2 and applications to rigidity problems, *Algebraic Geometry and Physics*, 2 (2025), 197-269.
30. (with Sui-Chung Ng) Multiplicities of the Betti map associated to a section of an elliptic surface from a differential-geometric perspective, *J. Geom. Analysis*, **33** (2023), Article 202 (30 pages)
29. (with S.-T. Chan) Asymptotic total geodesy of local holomorphic curves exiting a bounded symmetric domain and applications to a uniformization problem for algebraic subsets, *J. Differential Geom.* **120** (2022), 1-49.
28. (with J. Hong) Schur rigidity of Schubert varieties in rational homogeneous manifolds of Picard number one, *Selecta Math.* **26** (2020), Article 41 (27 pages).
27. (with J. Pila & J. Tsimerman) Ax-Schanuel for Shimura Varieties, *Annals of Mathematics*, **189** (2019), 945-978.
26. Zariski closures of images of algebraic subsets under the uniformization map on finite-volume quotients of the complex unit ball, *Compositio Math.* **155** (2019), 2129-2149.
25. (with Y. Zhang) Rigidity of pairs of rational homogeneous spaces of Picard number 1 and analytic continuation of geometric substructures on uniruled projective manifolds, *J. Differential Geom.*, **112** (2019), 263-345.
24. Geometric structures and substructures on uniruled projective manifolds, in *Foliation Theory in Algebraic Geometry (Simons Symposia)*, ed. P. Cascini, J. McKernan and J.V. Pereira, Springer-Verlag, Heidelberg-New York-London 2016, pp.103-148.
23. Holomorphic isometries of the complex unit ball into irreducible bounded symmetric domains, *Proc. Amer. Math. Soc.* **144** (2016), 4515-4525.
22. (with J. Hong) Characterization of smooth Schubert varieties in rational homogeneous manifolds of Picard number 1, *J. Alg. Geom.* **22** (2013), 333-362.
21. Extension of germs of holomorphic isometries up to normalizing constants with respect to the Bergman metric, *J. Eur. Math. Soc.* **14** (2012), 1617-1656.

20. (with S.-C. Ng) Germs of measure-preserving holomorphic maps from bounded symmetric domains to their Cartesian products, *J. Reine Angew. Math.* **669** (2012), 47-74.
19. (with V. Koziarz) Nonexistence of holomorphic submersions between complex unit balls equivariant with respect to a lattice and their generalizations, *Amer. J. Math.* **132** (2010), 1347-1363.
18. (with J. Hong) Analytic continuation of holomorphic maps respecting varieties of minimal rational tangents and applications to rational homogeneous manifolds, *J. Differential Geom.* **86** (2010), 539-567.
17. Geometric structures on uniruled projective manifolds defined by their varieties of minimal rational tangents, Proceedings of "Géométrie différentielle, Physique mathématique, Mathématique et Société", *Astérisque* **322** (2008), Volume II, 151-205, published by Société Mathématique de France.
16. (with J.-M. Hwang) Prolongations of infinitesimal linear automorphisms of projective varieties and rigidity of rational homogeneous spaces of Picard number 1 under Kähler deformation, *Invent. Math.* **160** (2005), 591-645.
15. Extremal bounded holomorphic functions and an embedding theorem for arithmetic varieties of rank ≥ 2 , *Invent. Math.* **158** (2004), 1-31.
14. (with J.-M. Hwang) Holomorphic maps from rational homogeneous spaces of Picard number 1 onto projective manifolds, *Invent. Math.* **136** (1999), 209-231.
13. (with J.-M. Hwang) Rigidity of irreducible Hermitian symmetric spaces of the compact type under Kähler deformation, *Invent. Math.* **131** (1998), 393-418.
12. (with Y.-T. Siu and S.-K. Yeung) Geometric superrigidity, *Invent. Math.* **113** (1993), 57-83.
11. Factorization of semisimple discrete representation of Kähler groups, *Invent. Math.* **110** (1992), 557-614.
10. (with H.-D. Cao) Holomorphic immersions between compact hyperbolic space forms, *Invent. Math.* **100** (1990), 49-61.
9. (with J.-Q. Zhong) Compactifying complete Kähler-Einstein manifolds of finite topological type and bounded curvature, *Ann. Math.* **129** (1989), 427-470.
8. Compactification of complete Kähler surfaces of finite volume satisfying certain curvature conditions, *Ann. Math.* **129** (1989), 383-425.
7. The uniformization theorem for compact Kähler manifolds of nonnegative holomorphic bisectional curvature, *J. Differential Geom.* **27** (1988), 179-214.
6. Uniqueness theorems of Hermitian metrics of seminegative curvature on locally symmetric spaces of negative Ricci curvature, *Ann. Math.* **125** (1987), 105-152.
5. Metric rigidity theorems on locally symmetric Hermitian spaces, *Proc. Nat. Acad. Sci. U.S.A.* **83** (1986), 2288-2290.

4. An embedding theorem of complete Kähler manifolds of positive bisectional curvature onto affine algebraic varieties, *Bull. Soc. Math. France*, **112** (1984), 197-258.
3. (with S.-T. Yau) Completeness of Kähler-Einstein metrics on bounded domains and the characterization of domains of holomorphy by curvature conditions, *Proc. Symp. Pure Math.*, **39** (1983), Part I, 41-59.
2. (with Y.-T. Siu and S.-T. Yau) The Poincaré-Lelong equation on complete Kähler manifolds, *Compositio Math.* **44** (1981), 183-218.
1. The Serre problem on Riemann surfaces, *Math. Ann.* **258** (1981), 145-168.