

Complete List of Publications of Loring W. Tu

February 2023

- [1] *Differential Forms in Algebraic Topology* (with Raoul Bott), Graduate Texts in Mathematics 82, Springer Verlag, New York, 1982, xiv + 331 pp.
Second printing, 1986.
Third corrected printing, 1995.
Chinese reprint published by World Publishing Corporation, Beijing, China, 1988.
New Chinese reprint, World Publishing Corporation, Beijing, China, 2009.
- [2] *Hodge Theory and the Local Torelli Problem*, Memoirs of the American Mathematical Society 279, Providence, 1983, vi + 64 pp. (MR 84k:14008)
- [3] On symmetric and skew-symmetric determinantal varieties (with Joe Harris), *Topology* 23 (1984), 71–84. (MR 85c:14032)
- [4] Chern numbers of kernel and cokernel bundles (with Joe Harris), *Invent. Math.* 75 (1984), 467–475. (MR 86j:14025)
- [5] Variation of Hodge structure (Lecture by Phillip Griffiths, written and revised by Loring Tu), in *Topics in Transcendental Algebraic Geometry*, Annals of Mathematics Studies 106, Princeton University Press, Princeton, 1984, pp. 3–28.
- [6] Curvature properties of the Hodge bundles (Lecture by Phillip Griffiths, written and revised by Loring Tu), in *Topics in Transcendental Algebraic Geometry*, Annals of Mathematics Studies 106, Princeton University Press, Princeton, 1984, pp. 29–49.
- [7] Infinitesimal variation of Hodge structure (Lecture by Phillip Griffiths, written and revised by Loring Tu), in *Topics in Transcendental Algebraic Geometry*, Annals of Mathematics Studies 106, Princeton University Press, Princeton, 1984, pp. 51–61.
- [8] Asymptotic behavior of a variation of Hodge structure (Lecture by Phillip Griffiths, written and revised by Loring Tu), in *Topics in Transcendental Algebraic Geometry*, Annals of Mathematics Studies 106, Princeton University Press, Princeton, 1984, pp. 63–74.
- [9] Asymptotic behavior of a variation of Hodge structure (Lecture by Phillip Griffiths, written and revised by Loring Tu), in *Topics in Transcendental Algebraic Geometry*, Annals of Mathematics Studies 106, Princeton University Press, Princeton, 1984, pp. 227–237.
- [10] Macaulay’s theorem and local Torelli for weighted hypersurfaces, *Compositio Mathematica* 60 (1986), 33–44.
- [11] Degeneracy loci, Proceedings of the International Conference on Algebraic Geometry (Berlin, 1985), Teubner Verlagsgesellschaft, Leipzig, 1986, 296–305.
- [12] Generic Torelli for weighted hypersurfaces (with Ron Donagi), *Math. Ann.* 276 (1987), 399–413.
- [13] Variational Torelli implies generic Torelli (with David Cox and Ron Donagi), *Invent. Math.* 88

- (1987), 439–446.
- [14] The connectedness of symmetric and skew-symmetric degeneracy loci: even ranks, *Trans. Amer. Math. Soc.* 313 (1989), 381–392.
 - [15] *Differentsial'nye formy v algebraicheskoi topologii* (with Raoul Bott, in Russian) [Differential forms in algebraic topology] Translated from the English by I. V. Savel'ev and G. S. Shmelev. Translation edited and with a preface by A. A. Kirillov. "Nauka", Moscow, 1989. 336 pp.
 - [16] The connectedness of degeneracy loci, in *Topics in Algebra*, Banach Center Publications 26, PWN (Polish Scientific Publishers), Warsaw, 1990, 235–248.
 - [17] The connectedness of symmetric degeneracy loci: odd ranks (with Joe Harris), in *Topics in Algebra*, Banach Center Publications 26, PWN (Polish Scientific Publishers), Warsaw, 1990, 249–256.
 - [18] Theta divisors for vector bundles (with Montserrat Teixidor), *Contemporary Mathematics* 136 (1992), 327–342.
 - [19] Semistable bundles over an elliptic curve, *Advances in Mathematics* 98 (1993), 1–26.
 - [20] Theta functions for $SL(n)$ versus $GL(n)$ (with Ron Donagi), *Mathematical Research Letters* 1 (1994), 345–357.
 - [21] *Differential Forms in Algebraic Topology* (with Raoul Bott, in Japanese), Springer-Verlag Tokyo, 1996.
 - [22] Equivariant characteristic classes in the Cartan model (with Raoul Bott), *Geometry, Analysis, and Applications (Varanasi, 2000)*, World Scientific Publishing, River Edge, NJ, 3–20.
 - [23] The life and works of Raoul Bott, in *The Founders of Index Theory: Reminiscences of Atiyah, Bott, Hirzebruch, and Singer*, edited by S.-T. Yau, International Press, Somerville, MA, 2003, pp. 85–112. An updated version appeared in the *Notices of the American Mathematical Society* 53 (2006), 554–570.
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 - [25] Une courte démonstration de la formule de Campbell-Hausdorff (A short proof of the Campbell-Hausdorff formula), *Journal of Lie Theory* 14 (2004), 501–508.
 - [26] A partial order on partitions and the generalized Vandermonde determinant, *Journal of Algebra* 278 (2004), 127–133.
 - [27] On the localization formula in equivariant cohomology (with Andrés Pedroza), *Topology and Its Applications* 154 (2007), 1493–1501.
 - [28] *An Introduction to Manifolds*, Universitext, Springer, New York, 2008, xvi + 360 pages.

- [29] Computing characteristic numbers using fixed points, in *A Celebration of the Mathematical Legacy of Raoul Bott*, CRM Proceedings and Lecture Notes, vol. 50, American Mathematical Society, Providence, RI, 2010, pp. 185–206.
- [30] *An Introduction to Manifolds*, second edition, Universitext, Springer, New York, 2011, xviii + 411 pages.
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- [32] The Abdus Salam School of Mathematical Sciences in Pakistan, *Notices of the American Mathematical Society* 58 (2011), pp. 938–943.
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- [35] On the genesis of the Woods Hole fixed point theorem, *Notices of the American Mathematical Society* 62 (2015), pp. 1200–1206.
- [36] Computing the Gysin map using fixed points, in *Algebraic Geometry and Number Theory*, Proceedings of the CIMPA Summer School on Algebraic Geometry and Number Theory (Istanbul, June 2–11, 2014), edited by H. Mourtada, C. C. Sarioğlu, C. Soulé, A. Zeytin, Birkhäuser, 2017.
- [37] *Differential Geometry: Connections, Curvature, and Characteristic Classes*, Graduate Texts in Mathematics 275, Springer, New York, 2017.
- [38] Computing topological invariants using fixed points. *Proceedings of the Sixth International Congress of Chinese Mathematicians*. Vol. II, 285–298, Adv. Lect. Math. (ALM), 37, Int. Press, Somerville, MA, 2017.
- [39] Equivariant characteristic classes, in *Raoul Bott: Collected Papers*, Vol. 5, pp. 103–105, Birkhäuser, 2017.
- [40] *Raoul Bott: Collected Papers*, Vol. 5, editor, Birkhäuser, 2017.
- [41] *An Introduction to Manifolds* (Japanese translation), Shokabo Publisher, Tokyo, Japan, 2019.
- [42] *Introductory Lectures in Equivariant Cohomology*, Annals of Mathematics Studies vol. 204, Princeton University Press, Princeton, New Jersey, 2020.
- [43] Dodging a bullet, in *Math in the Time of Corona*, edited by A. Wonders, *Mathematics Online First Collections*, Springer Nature Switzerland AG 2020. https://doi.org/10.1007/16618_2020_15

- [44] Lefschetz fixed point theorems for correspondences, to be published in *Mathematics Going Forward*, Lecture Notes in Mathematics vol. 2313, Springer, 2023.
- [45] Gysin formulas and equivariant cohomology, to be published in *Group Actions and Equivariant Cohomology*, Contemporary Mathematics, American Mathematical Society, 2023.