Dror Bar-Natan — Curriculum Vitae (Short)

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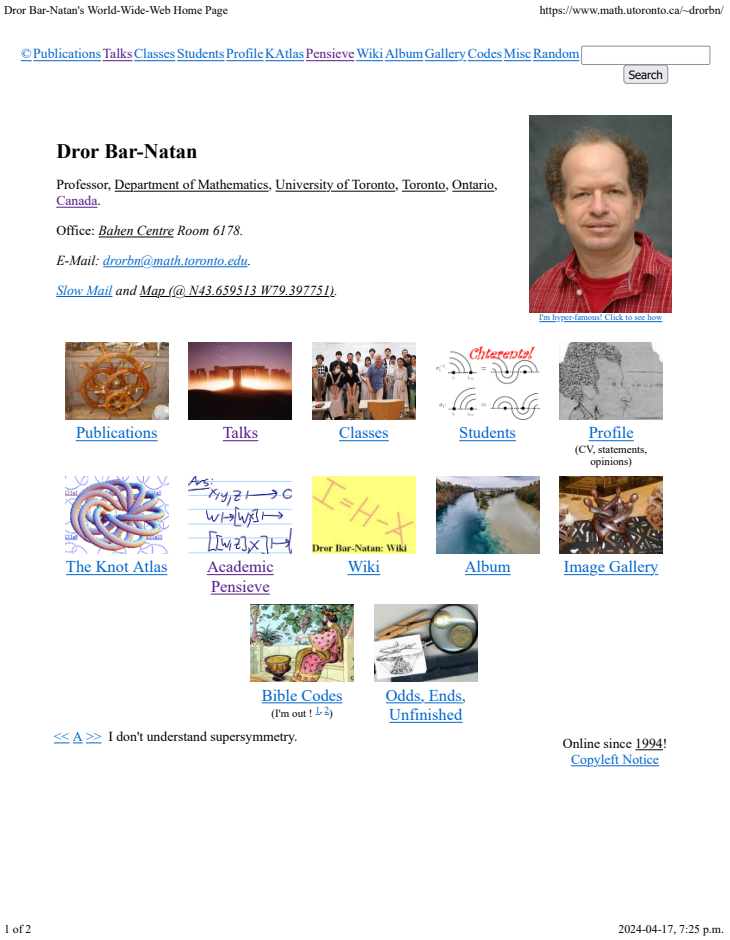
1982–1984: B.Sc. in mathematics, Tel Aviv University, *summa cum laude*.
1984–1987: Military service (taught high school level mathematics).
1987–1991: Ph.D. in mathematics, Princeton University. Title: *Perturbative aspects of the Chern-Simons topological quantum field theory.* Advisor: Professor Edward Witten.
1991–1995: Benjamin Peirce Assistant Professor at Harvard University.
1995–1997: Senior Lecturer of Mathematics at the Hebrew University, Jerusalem.
1997–2004: Associate Professor of Mathematics at the Hebrew University, Jerusalem.
1999-2000: On sabbatical in Berkeley; fall semester as a "Visiting Miller Professor" at the University of California, spring semester at MSRI.
2002-2006: Associate Professor of Mathematics at the University of Toronto.
From July 2006: Professor of Mathematics at the University of Toronto.

Author of 46 peer-reviewed publications, about 17 other publications, speaker in about 281 events (since 1998), teacher of about 73 classes, supervisor of about 39 students (summer projects to PhD) and 9 post-doctoral fellows, receipient of about 12 research grants.



Selected Publications.

- *On the Vassiliev Knot Invariants,* Topology **34** (1995) 423–472.
- *Non-Associative Tangles,* in *Geometric topology* (proceedings of the Georgia international topology conference), (W. H. Kazez, ed.), 139–183, Amer. Math. Soc. and International Press, Providence, 1997.
- With S. Garoufalidis, *On the Melvin-Morton-Rozansky Conjecture,* Inventiones Mathematicae **125** (1996) 103–133.
- *Lie Algebras and the Four Color Theorem,* Combinatorica **17-1** (1997) 43–52.
- *On Associators and the Grothendieck-Teichmuller Group,* Selecta Mathematica (New Series) **4** (1998) 183–212.
- With S. Garoufalidis, L. Rozansky, and D. P. Thurston, *Wheels, Wheeling, and the Kontsevich Integral of the Unknot,* Israel Journal of Mathematics **119** (2000) 217–237.
- With S. Garoufalidis, L. Rozansky, and D. P. Thurston, *The Århus Integral of Rational Homology 3-Spheres I: A Highly Non Trivial Flat Connection on S^3,* Selecta Mathematica, New Series **8** (2002) 315–339.
- With B. McKay, M. Bar-Hillel and G. Kalai, *Solving the Bible Code Puzzle,* Statistical Science **14-2** (1999) 150–173.
- With T. Q. T. Le and D. P. Thurston, *Two Applications of Elementary Knot Theory to Lie Algebras and Vassiliev Invariants,* Geometry and Topology **7-1** (2003) 1–31.
- *Khovanov's Homology for Tangles and Cobordisms,* Geometry and Topology **9-33** (2005) 1443–1499.
- *Fast Khovanov Homology Computations,* Journal of Knot Theory and its Ramifications **16-3** (2007) 243–255.
- *Balloons and Hoops and their Universal Finite Type Invariant, BF Theory, and an Ultimate Alexander Invariant,* Acta Mathematica Vietnamica **40-2** (2015) 271–329, Web/papers/KBH/.
- With Z. Dancso, *Finite Type Invariants of W-Knotted Objects II: Tangles, Foams, and the Kashiwara-Vergne Problem,* Mathematische Annalen **367** (2017) 1517–1586, arXiv:1405.1955.
- With R. van der Veen, *A Perturbed-Alexander Invariant, Quantum Topology* **15** (2024) 449–472, arXiv:2206.12298.
- With R. van der Veen, *A Fast, Strong, Topologically Meaningful and Fun Knot Invariant,* arXiv:2509.18456.