**Dror Bar-Natan**

 **Two Page CV**

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**Age now:** 53. Born January 30th, 1966. Holds Israeli, US, and Canadian citizenships.

**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 “Visiting Miller Professor” at the University of California, spring semester at MSRI.

**2002-2006:** Associate Professor of Mathematics at the University of Toronto.

**Since July 2006:** Professor of Mathematics at the University of Toronto.

**Current Grant:** NSERC Discovery, *Poly-Time Knot Theory and Quantum Algebra,* (2018–2023, CDN$140,000).

**10 Career Best Publications:**

1. *On the Vassiliev Knot Invariants,* Topology 34 (1995) 423–472. (Reported at the prestigious Séminaire Bourbaki. See P. Vogel, *Invariants de Vassiliev des nœuds [d’après D. Bar-Natan, M. Kontsevich et V. A.Vassiliev],* Séminaire Bourbaki 761 (1993) 1–17 & Asterisque 216 (1993) 213–232).
2. With S. Garoufalidis, *On the Melvin-Morton-Rozansky Conjecture,* Inventiones Mathematicae 125 (1996) 103–133.
3. *On Associators and the Grothendieck-Teichmüller Group,* Selecta Mathematica (New Series) 4 (1998) 183–212.
4. 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 S3,* Selecta Mathematica, New Series 8 (2002) 315–339.
5. With B. McKay, M. Bar-Hillel and G. Kalai, *Solving the Bible Code Puzzle,* Statistical Science 14-2 (1999) 150–173.
6. 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.
7. *Khovanov’s Homology for Tangles and Cobordisms,* Geometry and Topology 9-33 (2005) 1443–1499.
8. *Balloons and Hoops and their Universal Finite Type Invariant, BF Theory, and an Ultimate Alexander Invariant,* Acta Mathematica Vietnamica 40-2 (2015) 271–329.
9. With Z. Dancso, *Finite Type Invariants of W-Knotted Objects II: Tangles, Foams, and the Kashiwara-Vergne Problem,* Mathematische Annalen 367 (2017) 1517-1586.
10. With R. van der Veen, *A Polynomial Time Knot Polynomial,* Proc. Amer. Math. Soc. 147 (2019) 377–397.

**Talks.** Over the past 20 years I have given several hundred research presentations across the globe. See <http://www.math.toronto.edu/~drorbn/Talks/>.

**Collaborations.** I maintain active research collaborations with Anton Alekseev of Geneva, Zsuzsanna Dancso of Sydney, Dylan Thurston of Indiana, and Roland van der Veen of Groningen.

**Students.** Over the years I had approximately 40 research supervision relationships with students at all levels, including about 15 PhD students. See a partial description at <http://www.math.toronto.edu/~drorbn/Students/>.

This document is at <http://drorbn.net/AcademicPensieve/2019-10/>.

A full version of my CV is at <http://www.math.toronto.edu/~drorbn/Profile/>.