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Pure Mathematics

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## Qualifications

Doctor of Philosophy, PhD in Computer Science, The University of Manchester

1 Jan 2000 → 6 Dec 2002

Award Date: 6 Dec 2002

Bachelor of Science, Mathematics, University of Padua

1 Sept 1994 → 15 Nov 2015

Award Date: 15 Nov 1999

## Research outputs

MONOIDAL KLEISLI BICATEGORIES AND THE ARITHMETIC PRODUCT OF COLOURED SYMMETRIC SEQUENCES

Gambino, N., Garner, R. & VASILAKOPOULOU, CHRISTINA., 22 Dec 2023, (Accepted/In press) In: Documenta Mathematica.

### The effective model structure and -groupoid objects

Gambino, N., Henry, S., Sattler, C. & Szumiło, K., 9 Jun 2022, In: Forum of Mathematics, Sigma. 10, p. 1-59 59 p., e34.

### On the formal theory of pseudomonads and pseudodistributive laws

Gambino, N. & Lobbia, G., 2021, In: Theory and Applications of Categories. 37, p. 14-56 43 p.

### The Frobenius condition, right properness, and uniform fibrations

Gambino, N. & Sattler, C., Dec 2017, In: J. Pure Appl. Algebra. 221, 12, p. 3027-3068 42 p.

### On operads, bimodules and analytic functors

Gambino, N. & Joyal, A., 9 Aug 2017, Providence: American Mathematical Society. 115 p. (Memoirs of the American Mathematical Society; vol. 249, no. 1184)

### Homotopy-initial algebras in type theory

Awodey, S., Gambino, N. & Sojakova, K., Feb 2017, In: Association for Computing Machinery. Journal. 63, 6, p. 1-45 45 p., 51.

### Polynomial functors and polynomial monads

Gambino, N. & Kock, J., Jan 2013, In: Mathematical Proceedings of the Cambridge Philosophical Society. 154, 1, p. 153-192 40 p.

### Inductive types in homotopy type theory

Awodey, S., Gambino, N. & Sojakova, K., Jun 2012, *Proceedings of the 2012 27th annual ACM/IEEE symposium on logic in computer science, LICS 2012, Dubrovnik, Croatia, June 25–28, 2012*. Dubrovnik, Croatia: IEEE Computer Society , p. 95-104 10 p. (Annual Institute of Electrical and Electronics Engineers Symposium on Logic in Computer Science).

### Double adjunctions and free monads

Fiore, T. M., Gambino, N. & Kock, J., 2012, In: Cahiers de Topologie et Geometrie Differentielle Categoriques. 53, 4, p. 242-307 66 p.

**Monads in double categories**

Fiore, T. M., Gambino, N. & Kock, J., Jun 2011, In: *J. Pure Appl. Algebra.* 215, 6, p. 1174-1197 24 p.

**Weighted limits in simplicial homotopy theory**

Gambino, N., Jul 2010, In: *J. Pure Appl. Algebra.* 214, 7, p. 1193-1199 7 p.

**Lawvere-Tierney sheaves in algebraic set theory**

Awodey, S., Gambino, N., Lumsdaine, P. L. & Warren, M. A., Sept 2009, In: *The Journal of Symbolic Logic.* 74, 3, p. 861-890 30 p.

**The identity type weak factorisation system**

Gambino, N. & Garner, R., 6 Dec 2008, In: *Theoretical Computer Science.* 409, 1, p. 94-109 16 p.

**The associated sheaf functor theorem in algebraic set theory**

Gambino, N., Nov 2008, In: *Annals of Pure and Applied Logic.* 156, 1, p. 68-77 10 p.

**Homotopy limits for 2-categories**

Gambino, N., 1 Jul 2008, In: *Mathematical Proceedings of the Cambridge Philosophical Society.* 145, 1, p. 43-63 21 p.

**The Cartesian closed bicategory of generalised species of structures**

Fiore, M., Gambino, N., Hyland, M. & Winskel, G., Feb 2008, In: *Journal of the London Mathematical Society.* 77, 1, p. 203-220 18 p.

**Spatiality for formal topologies**

Gambino, N. & Schuster, P., 1 Feb 2007, In: *Mathematical Structures in Computer Science.* 17, 1, p. 65-80 16 p.

**Heyting-valued interpretations for constructive set theory**

Gambino, N., Jan 2006, In: *Annals of Pure and Applied Logic.* 137, 1-3, p. 164-188 25 p.

**Presheaf models for constructive set theories**

Gambino, N., 6 Oct 2005, *From sets and types to topology and analysis: Towards practicable foundations for constructive mathematics.* Crosilla, L. & Schuster, P. (eds.). Oxford: Oxford University Press, p. 62-77 16 p. (Oxford Logic Guides; no. 48).

**Wellfounded trees and dependent polynomial functors**

Gambino, N. & Hyland, M., 2004, *Types for proofs and programs. International workshop, TYPES 2003, Torino, Italy, April 30 -- May 4, 2003. Revised selected papers..* Springer Berlin, p. 210-225 16 p.

**Collection principles in dependent type theory**

Aczel, P. & Gambino, N., 14 Feb 2002, *Types for proofs and programs: International workshop, TYPES 2000, Durham, UK, December 8-12, 2000. Selected papers.* Callaghan, P., Luo, Z., McKinna, J. & Pollack, R. (eds.). Berlin: Springer Berlin, p. 1-23 23 p. (Lecture Notes in Computer Science; vol. 2277).

## Awards

## Projects