

Publications of William DeMeo (as of December 2018)

Journal Articles

1. *Polynomial-time tests for difference terms in idempotent varieties*, with Freese and Valeriote.
Submitted to *IJAC*; preprint link: github.com/UniversalAlgebra/term-conditions
2. *Universal algebraic methods for constraint satisfaction problems*, with C. Bergman.
Submitted to *IJAC*; preprint link: [arXiv \[cs.LO\]](https://arxiv.org/abs/1801.08010)
3. *Isotopic algebras with nonisomorphic congruence lattices*, *Algebra Universalis* **72**:295–298, 2014; preprint link: github.com/williamdemeo/Isotopy
4. *Expansions of finite algebras and their congruence lattices*, *Algebra Universalis* **69**:257–278, 2013; preprint link: github.com/williamdemeo/Overalgebras

Refereed Conference Proceedings

5. *Proceedings of Algebras and Lattices in Hawaii 2018*, co-editor with K. Adaricheva, J. Hyndman.
6. *Topics in nonabelian harmonic analysis and DSP applications*, Proceedings of the International Symposium on Musical Acoustics, Nara, Japan 2004 (best paper award).
7. *Characterizing musical signals with Wigner-Ville interferences*, Proceedings of the International Computer Music Conference, Göteborg, Sweden 2002.
8. *Approximating eigenvalues of large stochastic matrices*, Proceedings of the 8th Copper Mt. Conference on Iterative Methods, Colorado, USA 1998.

Papers in Progress

A new characterization of fiber products of lattices, with P. Mayr and N. Ruskuc.
Draft available at github.com/UniversalAlgebra/fg-fin-lat

Representing finite lattices as congruence lattices of finite algebras, with R. Freese and P. Jipsen.
Draft available at github.com/UniversalAlgebra/fin-lat-rep

Books in Progress

Algebras, Categories and Types: with computer-aided proofs, with Hyeyoung Shin.

A Concise Course in Category Theory, with Charlotte Aten and Venanzio Capretta.

Problems in Real and Complex Analysis.

Problems in Groups and Rings.