



Peer reviewed journal articles

- 2020 Classifying module categories for generalized Temperley-Lieb-Jones \ast -2-Categories (with Hernández-Palomares), *Internat. J. Math.* **31** (2020), no. 04, 2050027, [MR4098904](#), [arXiv:1905.00471](#)
- 2020 Harmonic gradients on higher dimensional Sierpinski gaskets (with Brown, Mograby, Rogers, and Sangam), *Fractals* **28** (2020), no. 06, 2050108, [arXiv:1908.10539](#)
- 2022 Gray-categories model algebraic tricategories, *Theor. Appl. Categ.* **38** (2022), no. 29, pp 1136-1155, [arXiv:2203.03748](#)
- 2023 3D Koch-type crystals (with Vélez-Santiago), *J. Fractal Geometry* **10** (2023), no. 1/2, pp. 109–149, [arXiv:2302.10628](#)

ArXiv preprints (under review)

- 2024 Dagger n -categories (with Hungar, Johnson-Freyd, Krulewski, Müller, Nivedita, Penneys, Reutter, Scheimbauer, Stehouwer, Vuppulury), [arXiv:2403.01651](#)
- 2024 Foundations for operator algebraic tricategories, [arXiv:2404.05193](#)
- 2024 Manifestly unitary higher Hilbert spaces (with Chen, Hungar, Penneys, Sanford), [arXiv:2410.05120](#)

Manuscripts (in preparation)

- 2025 Unitary Quantum Symmetries Lite (UQSL) textbook (with Kawagoe and Penneys), [available online](#)
- 2025 Bases for 3-Hilbert spaces and higher unitary duality (with Hungar, Penneys, Wesley)
- 2025 The homotopy 3-type of abelian C^* -algebras (with Faurot)
- 2025 Models for higher Hilbert spaces as homotopy fixed points (with Müller, Penneys, Stehouwer)
- 2025 Knot theoretic model for $\text{Rep}(\mathcal{U}_q(\mathfrak{sl}_4))$ -webs arising from HOMFLY-PT (with Lu and Poudel)
- 2025 A duality theory in the spirit of functional analysis (with Circele)