

### ArXiv Papers and Publications

“Dynamics of the Mixmaster Type Universe with Topology  $\mathbb{R} \times S^3 \times S^3$ ,” W.M. Stuckey, L. Witten & Bob Stewart, *General Relativity and Relativistic Astrophysics, Proceedings of the 2<sup>cd</sup> Canadian Conference*, 64 – 67 (World Scientific, Singapore, 1988).

“Dynamics of the Mixmaster-type, Vacuum Universe with Geometry  $\mathbb{R} \times S^3 \times S^3 \times S^3$ ,” W.M. Stuckey, L. Witten & Bob Stewart, *General Relativity and Gravitation* **22**, 1321 – 1339 (1990).

“Some Recent Developments in Mixmaster Cosmology,” W.M. Stuckey, *Comments on Astrophysics* **15**, No. 2, 63 – 70 (1990).

“Can Galaxies Exist within Our Particle Horizon with Hubble Recessional Velocities Greater Than  $c$ ?” W.M. Stuckey, *American Journal of Physics* **60**, No. 2, 142 – 146 (1992).

“Derivation of the Spectral Energy Density in  $\mathbb{R} \times S^3$ ,” W.M. Stuckey & G. Bambakidis, *General Relativity and Relativistic Astrophysics, Proceedings of the 4<sup>th</sup> Canadian Conference*, 347 – 349 (World Scientific Press, Singapore, 1992).

“Hamiltonian for the Vacuum Mixmaster Universe with Geometry  $\mathbb{R} \times S^7$ ,” R.M. Cassidy & W.M. Stuckey, *General Relativity and Relativistic Astrophysics, Proceedings of the 4<sup>th</sup> Canadian Conference*, 35 – 39 (World Scientific Press, Singapore, 1992).

“Kinematics between Comoving, Photon Exchangers in the Closed Matter-dominated Universe,” W.M. Stuckey, *American Journal of Physics* **60**, No. 6, 554 - 560 (1992).

“The Schwarzschild Black Hole as a Gravitational Mirror,” W.M. Stuckey, *American Journal of Physics* **61**, No. 5, 448 – 456 (1993).

“Recession Velocities Greater Than  $c$  within the Particle Horizon,” W.M. Stuckey, *General Relativity and Relativistic Astrophysics, Proceedings of the 5<sup>th</sup> Canadian Conference*, 454 – 458 (World Scientific Press, Singapore, 1994).

“The Observable Universe Inside a Black Hole,” W.M. Stuckey, *American Journal of Physics* **62**, No. 9, 788 – 795 (1994).

“Defining Spacetime,” W.M. Stuckey, *Modern Mathematical Models of Time and their Applications to Physics and Cosmology, Astrophysics and Space Science* **244**, 371 – 374 (Kluwer, Boston, 1996).

“Uniform Spaces via Topological Groups and Non-locality,” W.M. Stuckey, *Causality and Locality in Modern Physics and Astronomy*, 235 – 242 (Kluwer, Boston, 1998).

“Leibniz’s Principle, Dynamism and Non-locality,” W.M. Stuckey, *Physics Essays* **12**, No. 3, 414 – 419 (1999).

“Pregeometry and the Trans-Temporal Object,” W.M. Stuckey, *Studies on the Structure of Time: from Physics to Psycho(patho)logy*, 121 – 128 (Kluwer Academic, New York, 2000).

“Uniform Spaces in the Pregeometric Modeling of Quantum Non-Separability.” W.M. Stuckey & Michael Silberstein, <http://arxiv.org/abs/gr-qc/0003104> (revised April, 2001).

“Science, Religion, & Templeton Prize,” W. Mark Stuckey, *Letters: Physics Today* **54**, No. 8, 72 – 74 (2001).

“Metric Structure and Dimensionality over a Borel Set via Uniform Spaces,” W.M. Stuckey, <http://arxiv.org/abs/gr-qc/0109030> (revised 25 September 2001).

“Pregeometry via Uniform Spaces,” W.M. Stuckey & Wyeth Raws, *Gravitation & Cosmology: From the Hubble Radius to the Planck Scale*, 477 – 482 (Kluwer Academic, Dordrecht, 2002).

“On a Pregeometric Origin for Spacetime Dimensionality and Metric Structure,” W.M. Stuckey, <http://arxiv.org/abs/gr-qc/0208057>.

“Causality as a Casualty of Pregeometry,” W.M. Stuckey, *The Nature of Time: Geometry, Physics and Perception*, 353 – 362 (Kluwer Academic, Dordrecht, 2003).

“Of Quantum Non-Locality & Anti-Bullets,” Mark Stuckey, *Metanexus: Views 2003.03.19*.

“Deflating Quantum Mysteries via the Relational Blockworld,” W.M. Stuckey, Michael Silberstein & Michael Cifone, *Physics Essays* **19**, No. 2, 269 – 283 (2006), <http://arxiv.org/abs/quant-ph/0503065>.

“Reversing the Arrow of Explanation in the Relational Blockworld: Why Temporal Becoming, the Dynamical Brain and the External World are in the Mind,” W.M. Stuckey, Michael Silberstein & Michael Cifone, in *Endophysics, Time, Quantum and the Subjective*, 293 – 316 (World Scientific, Singapore, 2005).

“Geometrical quantum mechanics with spacetime relations: A defense of heterodoxy,” Michael Silberstein, Michael Cifone & W.M. Stuckey submitted to *Philosophy of Science*, March 2006.

“Quantum to Classical Transition per the Relational Blockworld,” W.M. Stuckey, Michael Silberstein and Michael Cifone, <http://arxiv.org/abs/quant-ph/0605105>.

“An Argument for 4D Blockworld from a Geometric Interpretation of Non-relativistic Quantum Mechanics,” Michael Silberstein, W.M. Stuckey & Michael Cifone, *Relativity and the Dimensionality of the World*, 197 – 216 (Springer-Verlag, Germany, 2007), <http://arxiv.org/abs/quant-ph/0605039>.

“The Relational Blockworld Interpretation of Non-relativistic Quantum Mechanics,” W.M. Stuckey, Michael Silberstein & Michael Cifone, *Foundations of Probability and Physics 4*, edited by Guillaume Adenier, Christopher A. Fuchs and Andrei Yu. Khrennikov, 412 – 421 (American Institute of Physics, Melville, NY, 2007).

“Implications for a spatially discrete transition amplitude in the twin-slit experiment,” W.M. Stuckey, <http://arxiv.org/abs/quant-ph/0703039> (revised December 2007).

“Reconciling Spacetime and the Quantum: Relational Blockworld and the Quantum Liar Paradox,” W.M. Stuckey, Michael Silberstein & Michael Cifone, *Foundations of Physics* **38**, No. 4, 348 – 383 (2008), <http://arxiv.org/abs/quant-ph/0510090> (revised December 2007).

“Unification per the Relational Blockworld,” W.M. Stuckey & Michael Silberstein, <http://arxiv.org/abs/0712.2778> (revised March 2008).

“Why Quantum Mechanics Favors Adynamical and Acausal Interpretations such as Relational Blockworld over Backwardly Causal and Time-Symmetric Rivals,” Michael Silberstein, Michael Cifone & W.M. Stuckey, *Studies in History & Philosophy of Modern Physics* **39**, No. 4, 736 – 751 (2008). <http://dx.doi.org/10.1016/j.shpsb.2008.07.005>.

“Relational Blockworld: Towards a Discrete Graph Theoretic Foundation of Quantum Mechanics,” W.M. Stuckey, Timothy McDevitt & Michael Silberstein, <http://arxiv.org/abs/0903.2642>.

“Gauge Invariance from a Graphical Self-Consistency Criterion,” W.M. Stuckey, T.J. McDevitt & Michael Silberstein. Submitted to *Foundations of Physics*, March 2011. Revised version resubmitted in April 2011. Submitted to *Journal of Physics A: Mathematical & Theoretical* in June 2011. <http://arxiv.org/abs/1106.3339>.

“Modified Regge Calculus as an Explanation of Dark Energy,” W.M. Stuckey, Timothy McDevitt & Michael Silberstein, *Classical & Quantum Gravity* **29** 055015 (2012). <http://arxiv.org/abs/1110.3973>.

“Explaining the Supernova Data without Accelerating Expansion,” W.M. Stuckey, Timothy McDevitt & Michael Silberstein. Honorable Mention in the Gravity Research Foundation 2012 Awards for Essays on Gravitation, May 2012. *International Journal of Modern Physics D* **21**, No. 11, 1242021 (2012) DOI: 10.1142/S0218271812420217 <http://users.etaown.edu/s/STUCKEYM/GRFessay2012.pdf>

“Being, Becoming and the Undivided Universe: A Dialogue between Relational Blockworld and the Implicate Order Concerning the Unification of Relativity and Quantum Theory,” Michael Silberstein, W.M. Stuckey & Timothy McDevitt. *Foundations of Physics* **43**, No. 4, 502-532 (2013). <http://arxiv.org/abs/1108.2261>.

“An Adynamical, Graphical Approach to Quantum Gravity and Unification,” W.M. Stuckey, Michael Silberstein & Timothy McDevitt, <http://arxiv.org/abs/0908.4348>. To appear in IOP book on quantum spacetime in 2014.