



# QUANTUM ONTOLOGY DE-NATURALIZED

## WHAT WE CAN'T LEARN FROM QUANTUM MECHANICS

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## REFERENCES

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-  Arenhart, J. R. B. and R. W. Arroyo (2021a), “Back to the question of ontology (and metaphysics),” Manuscrito, 44, 2, pp. 1-51, DOI: *10.1590/0100-6045.2021.V44N2.JR*.
-  — (2021b), “The Spectrum of Metametaphysics: Mapping the state of art in scientific metaphysics,” Veritas, 66, 1.
-  Arroyo, R. W. and J. R. B. Arenhart (2022a), “The epistemic value of metaphysics,” Synthese, 200, 337.
-  — (2022b), “Whence deep realism for Everettian quantum mechanics?” Foundations of Physics.
-  Bohm, D. (1952), “A suggested interpretation of the quantum theory in terms of ‘hidden’ variables, I,” Physical Review, 85, 2, p. 166.
-  Everett, H. (1957), “‘Relative state’ formulation of quantum mechanics,” Reviews of modern physics, 29, 3, pp. 454-462.

-  French, S. (2014), The structure of the world: Metaphysics and representation, Oxford University Press, Oxford.
-  — (2018), “Realism and Metaphysics,” in The Routledge Handbook of Scientific Realism, ed. by J. Saatsi, Routledge, New York, pp. 394-406.
-  Ghirardi, G. C., A. Rimini, and T. Weber (1986), “Unified dynamics for microscopic and macroscopic systems,” Physical Review D, 34, 2, p. 470.
-  Hofweber, T. (2016), “Carnap’s Big Idea,” in Ontology after Carnap, ed. by S. Blatti and S. Lapointe, Oxford University Press, Oxford, pp. 13-30.
-  Maudlin, T. (1995), “Three measurement problems,” Topoi, 14, 1, pp. 7-15.
-  — (2007), The metaphysics within physics, Oxford University Press on Demand, Oxford.
-  Ney, A. (2014), Metaphysics: an introduction, Routledge, New York.



Quine, W. v. O. (1951), "On Carnap's Views on Ontology,"

Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition,  
2, 5, pp. 65-72.



Wallace, D. (2012),

The emergent multiverse: Quantum theory according to the Everett interpretation,  
Oxford University Press, Oxford.