

Meir Hemmo

List of Publications

A) Books

Hemmo, Meir and Shenker, Orly (2012): *The Road to Maxwell's Demon: Conceptual Foundations of Statistical Mechanics*. Cambridge, UK. Cambridge University Press. 327 pp.

Ben-Menahem, Yemima. and Hemmo, Meir (eds.) (2012): *Probability in Physics*. The Frontiers Collection, Berlin Heidelberg. Springer-Verlag. 317 pp.

B) Articles

Hemmo, Meir (1993): *The Philosophy of Quantum Mechanics: An Interactive Interpretation* by R. Healey. *Foundations of Physics* **23**, 1137-1145 (1993); see also *Foundations of Physics Letters* **6**, No. 4, 385-393 (1993).

Hemmo, M. and Shoham, S. Giora (1994): *A hermetic complement to quantum mechanics*. *Filosofia Oggi* **67**, 313-334.

Bacciagaluppi, Guido and Hemmo, Meir (1994): *Making sense of (approximate) decoherence*". *Philosophy of Science* (special PSA issue), 345-354.

Bacciagaluppi, Guido and Hemmo, Meir (1996): *Modal interpretations, decoherence and measurements*". *Studies in History and Philosophy of Modern Physics* **27**, 239-277.

Hemmo, Meir (1996): *Possible worlds in the modal interpretation*. *Philosophy of Science* **63**, S330-S337.

Bacciagaluppi, Guido and Hemmo, Meir (1998): *State preparation in the modal interpretation*. In: *Quantum Measurement: Beyond Paradox*, Eds. Healey, R. and Hellman, G., *Minnesota Studies in Philosophy of Science*, vol. **17**, pp. 95-114.

Hemmo, Meir (1998): *Quantum Histories in the Modal Interpretation*. In: *The Modal Interpretation of Quantum Mechanics*, Eds. Dieks, D. and Vermaas, P. (Dordrecht: Kluwer), pp. 253-278.

Hemmo, Meir and Shenker, Orly (2001): *Can we explain thermodynamics by quantum decoherence?"* *Studies in History and Philosophy of Modern Physics* **32**, No. 4, 555-568.

Hemmo, Meir (2002): *The Quantum Mechanics of Minds and Worlds*, by J. Barrett. *Studies in History and Philosophy of Modern Physics* **33**, 541-553 (2002).

Hemmo, Meir and Pitowsky, Itamar (2003): *Nonlocality and probability in many minds interpretations of quantum mechanics*. *British Journal for the Philosophy of Science* **54**, 225-243.

- Hemmo, Meir and Shenker, Orly (2003): Quantum decoherence and the approach to equilibrium. *Philosophy of Science* **70**, No. 2, 330-358.
- Hemmo, Meir (2003): Remarks on the direction of time in quantum mechanics. *Philosophy of Science* **70**, No. 5, 1458-1471.
- Hemmo, Meir and Shenker, Orly (2005): Quantum Decoherence and the Approach to Equilibrium II. *Studies in History and Philosophy of Modern Physics* **36**, 626-648.
- Berkovitz, Joseph and Hemmo, Meir (2005): Can we reconcile modal interpretations of quantum mechanics with special relativity?" *Philosophy of Science* **72**, 789-801.
- Berkovitz Joseph and Hemmo, Meir (2005): Modal interpretations of quantum mechanics and relativity: A reconsideration. *Foundations of Physics* **35**, No. 3: 373-397.
- Berkovitz, Joseph and Hemmo, Meir (2006): A New Modal Interpretation of Quantum Mechanics in Terms of Relational Properties. In: *Physical Theory and Its Interpretation: Essays in Honor of Jeffrey Bub*, Eds. Demopoulos, W. and Pitowsky, I., The Western Ontario Series in Philosophy of Science (Dordrecht: Springer), pp. 1-28.
- Hemmo, Meir and Shenker Orly (2006) von Neumann entropy doesn't correspond to thermodynamic entropy. *Philosophy of Science* **73**, 153-174.
- Hagar, Amit and Hemmo Meir (2006): Explaining the unobserved: Why quantum mechanics ain't (only) about information. *Foundations of Physics* **36**, 1295-1324
- Hemmo, M. and Pitowsky, Itamar (2007): Quantum probabilities and many worlds. *Studies in History and Philosophy of Modern Physics* **38**, 333-350.
- Hemmo, Meir (2009): Modal interpretations of quantum mechanics". In: *Compendium of Quantum Physics*. Eds. Weinert, F., Hentschel, K. and Greenberger, D. (Springer), 394-401.
- Hemmo, Meir and Shenker, Orly (2010): Maxwell's Demon. *The Journal of Philosophy* **107**, No. 8, 389-411.
- Hemmo Meir and Shenker, Orly (2011): Szilard's perpetual mobile. *Philosophy of Science* **78**, No. 2, 264-283.
- Hemmo, Meir and Shenker, Orly (2011): The philosophy of statistical Mechanics: Can probability explain the arrow of time in the second law of thermodynamics? *Philosophy Compass* (Oxford University Press) **6**, No. 9, 640-651.
- Hemmo, Meir and Shenker, Orly (2012): Measures Over Initial Conditions. In: *Probability in Physics*, Eds. Ben-Menahem, Y. and Hemmo, M. (Berlin Heidelberg: The Frontiers Collection, Springer-Verlag), 87-98.
- Hemmo, Meir and Shenker, Orly (2012): The mathematical representation of the arrow of time. *Iyyun. The Jerusalem Philosophical Quarterly* **61**, 167-192.

Hagar, Amit and Hemmo, Meir (2013): The primacy of geometry. *Studies in History and Philosophy of Modern Physics* **44**, 357-364.

Hemmo, Meir and Shenker, Orly (2013): On an incoherence between multiple realizability and supervenience: An argument for a type-identity physicalism. *Iyyun. The Jerusalem Philosophical Quarterly* **62**, 107-121. (In Hebrew)

Hemmo, Meir and Shenker, Orly (2013): Entropy and computation: The Landauer-Bennett thesis reexamined. *Entropy* **15**, 3297-3311.

Hemmo, Meir and Shenker, Orly (2013): Probability zero in Bohm's theory. *Philosophy of Science* **80**, 1148-1158.

Hemmo, Meir and Shenker, Orly (2014): Probability and typicality in deterministic physics. *Erkenntnis* (2015) **80**, 575-586. DOI 10.1007/s10670-014-9683-0

Hemmo, Meir and Shenker, Orly (2015): The emergence of macroscopic regularity. *Mind and Society* **14**, Vol. 2, 221-244. DOI 10.1007/s11299-015-0176-x

Hemmo, Meir and Shenker, Orly (2015): Letter to the editor. *International Studies in the Philosophy of Science*, DOI 10.1080/02698595.2015.1079075.

Hemmo, Meir and Shenker, Orly (2016): The Arrow of Time. In: *Cosmological and Psychological Time*, Eds. Dolev, Y. and Roubach, M. (Boston Studies in Philosophy of Science, Vol. 285, Springer), 155-162.

Hemmo, Meir and Shenker, Orly (2016): Maxwell's demon. *Oxford Online Handbook in Philosophy*, Oxford University Press.

Hemmo, Meir and Shenker, Orly (2016): A Quantum Mechanical Maxwellian Demon. In: *Time's Arrow and the Origin of the Universe: Reflections on Time and Chance: Essays in Honor of David Albert's Time and Chance*, Eds. Loewer, B., Weslake, B. and Winsberg, A. (Cambridge, Mass. Harvard University Press), forthcoming.

Hemmo, Meir and Shenker, Orly (2016): Classical ignorance in quantum statistical mechanics. *Foundations of Physics*, under review.

Hemmo, Meir and Shenker, Orly (2016): The quantum mechanics of extracting work from a single bath. *American Journal of Physics*, under review.

Hemmo, Meir and Shenker, Orly (2016): Emergent chance: A reply to List and Pivato. *Philosophical Review*, under review.

C) Conference Proceedings

Hemmo, Meir (2010): Comments on probability and rationality in Everett's interpretation of quantum mechanics, In: *Many Worlds, Everett, Quantum Theory and Reality*, Eds. Saunders, S., Barrett, J., Kent, A. and Wallace, D. (Oxford, Oxford University Press), pp. 163, 171-2, 259-260, 293, 405-6.

Proceedings of the conference The Everett Interpretation of Quantum Mechanics: 50 years on at Oxford, UK, July 2007.