

Jury report for the Hanneke Janssen Memorial Prize 2018.

The jury received five submissions, all of which were of high standard and competent works in their various areas. However there were two submissions of outstanding value: by Ruward Mulder (nominated by James Ladyman) and by Johannes Fankhauser (nominated by Renato Renner). The jury has decided to award the 2018 Hanneke Janssen Memorial Prize to Mulder for his Thesis "Worldly Patterns: Emergence, Functionalism and Pragmatic Reality in Wallacian quantum mechanics" and to single out Johannes Fankhauser's Thesis "Is the World just Wavefunction? Determinism and the metaphysics of hidden variables in quantum mechanics" for honorable mention, as a close runner-up. If there had been a second prize, it would go to him. Below is a summary of the Jury's deliberations.

On Mulder:

This work takes on the role of the alleged emergence of "quasi-classical worlds" in David Wallace's recent work on Everettian Quantum Mechanics, and analyses the claim that quasi-classical worlds emerge as 'patterns' in the sense of Dennett. The Jury especially values the very careful and thoughtful and clear argumentation in this Thesis.

Nevertheless, the Jury also had a few reservations about the submission: its conclusions were found to be a bit timid, and we would encourage a discussion of the implications of its analysis for emergence arguments more generally for a scientific publication of its results.

On Fankhauser :

This Thesis is a well-written, rich, and on occasion original, discussion of the issues of determinism, locality, and hidden variables in quantum mechanics.

However, the Jury found the definition of some central concepts unclear and some of its claims questionable.

We thus designate the 2018 Hanneke Janssen Memorial Prize to Ruward Mulder.

The Jury:

Jos Uffink (Chair)

Klaas Landsman

Christoph Lehner

Michiel Seevinck