

Program

Tuesday 18.10 2022 **The Many-Worlds Ontology**

Venue: [Porter Auditorium](#), 6 Klauzner St., Tel Aviv.

Chairman: Adrian Kent

- 9:30 **Yaron Oz**
Welcome and setting the goals
- 10:10 **Valia Allori**
Many-Worlds and Scientific Realism
- 11:00 Coffee Break
- 11:30 **Bixin Guo**
What We Talk About When We Talk About the Ontology of Everettian Quantum Mechanics
- 12:00 **Marcus Arvan**
Reinterpreting the Many-Worlds Interpretation of Quantum Mechanics: Dead Reckoning and the P2P Simulation Hypothesis
- 12:30 **Francois-Igor Pris**
A Wittgensteinian demystification of an Everettian interpretation of quantum mechanics
- 13:10 Lunch

Chairman: Simon Saunders

- 14:30 **Nicolas Gisin**
Many-Worlds in Classical Mechanics
- 15:10 **Paul Tappenden**
Making sense of Everettian fission without self-location uncertainty
- 15:50 Coffee Break
- 16:20 **Eddy Keming Chen**
Strong Determinism
- 17:00 **Open Discussion Everyone is welcome***
The MWI explains well the evolution of the world we experience, but does not single it out from numerous parallel worlds. How important is this weakness?

*For <5 minutes presentation on this or related question, send an email before the session

Wednesday 19.10 2022 **What is a “world” in the MWI?**

Venue: [Porter Auditorium](#), 6 Klauzner St., Tel Aviv.

Chairman: Ori Belkind

- 9:30 **Tim Maudlin**
 Local Beables, Wave Function Monism, and Empirical Content
- 10:20 **Alyssa Ney**
 Locality and the Metaphysics of Many Worlds
- 11:00 Coffee Break
- 11:30 **Mateus Araújo**
 Bell's Theorem, Many-Worlds, and Quantum Key Distribution
- 12:00 **Per Arve**
 The Ontology of the Many-Worlds Theory
- 12:30 **Michael Cuffaro**
 Everett, the Informational Interpretation, and the Open Systems View
- 13:10 Lunch

Chairman: Tim Maudlin

- 14:30 **Renato Renner**
 A Theorem about Many-Worlds Branches
- 15:20 **Andrew Jordan**
 Quantum Erasing the Memory of Wigner's Friend
- 15:50 Coffee Break
- 16:20 **Ovidiu Cristinel Stoica**
 The Relation between Wavefunction and 3D Space
- 17:00 **Open Discussion** **Everyone is welcome***
 Is "All macroscopic objects are well localized in 3D" a good definition
 of a world in the MWI? Can you think of an alternative
 characterization?

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Thursday 20.10 2022 **Probability in the MWI**

Venue: [Porter Auditorium](#), 6 Klauzner St., Tel Aviv.

Chairman: Stephan Hartmann

9:30 **Simon Saunders**
Decoherence-Based Branch-Counting implies the Born Rule

10:20 **Dustin Lazarovici**
Why Everett Solved the Probability Problem

11:00 Coffee Break

11:30 **Adrian Kent**
Many Worlds and the Limits of Science

12:10 **Jerome Romagosa**
Unlucky Branches: (Dis)confirmation in Many Worlds

12:35 **Zhongao Lu**
Personal Identity and Uncertainty in Everett's Multiverse

13:10 Lunch

Chairwoman: Valia Allori

14:30 **David Papineau**
How the MWI Matters: Relief, Regret and Distributive Justice

15:20 **David Albert**
TBA

16:10 Coffee Break

16:30 **Open Discussion Everyone is welcome***
Does it make sense to ask “what is the probability of an outcome of a measurement before the measurement has been carried out?”, Or is the only meaning of probability in the MWI a matter of self-location ignorance?

18:30 Refreshments (Lev auditorium, Shenkar building)

19:00 **Panel discussion: free will, time, quantum, and many worlds**
Yakir Aharonov, Nicolas Gisin, Renato Renner, David Wallace
Chairman: Yaron Oz

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Research workshop of the ISF: The Many-Worlds Interpretation of Quantum Mechanics

Friday 21.10 2022 MWI, cosmology and more

Venue: [Porter Auditorium](#), 6 Klauzner St., Tel Aviv.

Chairman: Lorenzo Maccone

- 9:30 **Don Page**
 Possibilities for Probabilities
- 10:10 **Erik Curiel**
 What Happens to EPR Correlations among the Many Worlds in Curved Spacetime?
- 10:40 Coffee Break
- 11:10 **Avshalom Elitzur**
 Do Parallel Worlds Leave Causal Traces in One Another?
- 11:40 **Nathan Argaman**
 Future-Input Dependence as an Interpretation of Quantum Mechanics
- 12:10 **Phil Pickering**
 Nonseparability in the Many Worlds Interpretation
- 12:40 Lunch
- 13:00 **Poster Session**

Sunday 23.10 2022 **MWI, Decoherence and More**

Venue: [Jaglom Hall](#), Senate Building, Tel Aviv University

Chairman: David Papinenau

- 9:30 **David Wallace**
 The Sky is Blue, and Other Reasons Quantum Theory is Not Underdetermined
- 10:30 **Guy Hetzroni**
 Consensus, theoretical virtues and interpretation: lessons from past debates
- 11:00 Coffee Break
- 12:35 **Jan Dziewior**
 Variants of Locality and Causality in Many Worlds
- 12:00 **Tomasz Bigaj**
 Identical particles, consistent histories and decoherence
- 12:30 **Michael Ridley**
 Quantum Probability from Temporal Structure
- 13:10 Lunch

Chairman: Sandu Popescu

- 14:30 **Lorenzo Maccone**
 Quantum Time, Quantum Spacetime and Time Measurements
- 15:10 **Open Discussion Everyone is welcome***
 Does decoherence with the environment play any role in the MWI?
- 16:20 **Jaffa tour**
- 19:00 **Banquet**

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Monday 24.10 2022 **Alternative Formalisms, Teleportation and more**

Venue: [Jaglom Hall](#), Senate Building, Tel Aviv University

Chairman: Andrew Jordan

9:30 **Yakir Aharonov**
Solving the Measurement Problem without Many Worlds

10:20 **Charles Bedard**
Teleportation Revealed

11:00 Coffee Break

11:30 **Samuel Kuypers**
Everettian Relative States in the Heisenberg Picture

12:00 **Mark Rubin**
Deutsch-Hayden Quantum Field Theory

12:30 **Mordecai Waegell**
Unambiguously Local Quantum Physics in Spacetime

13:10 Lunch

Chairman: Erik Curiel

14:30 **Paolo Faglia**
Non-Separability, Locality and Criteria of Reality in Everettian Quantum Mechanics

14:55 **Siddharth Muthukrishnan**
Everettian QM and Causal Explanations of Quantum Correlations

15:20 **TBA**

15:50 Coffee Break

16:20 **Lev Vaidman**
Information Transfer in Teleportation

17:00 **Open Discussion** **Everyone is welcome***
Is nonlocality in the MWI just a nonseparability without any action at a distance?

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