The Oxford Handbook
Département de physique
Université Paris Cité
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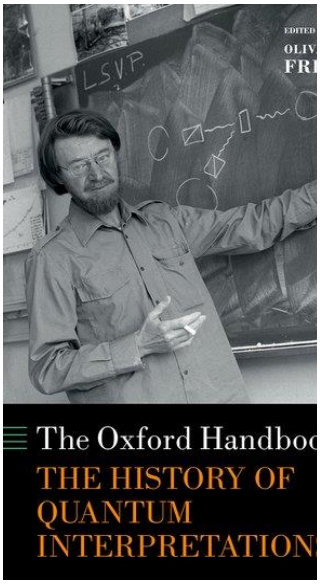

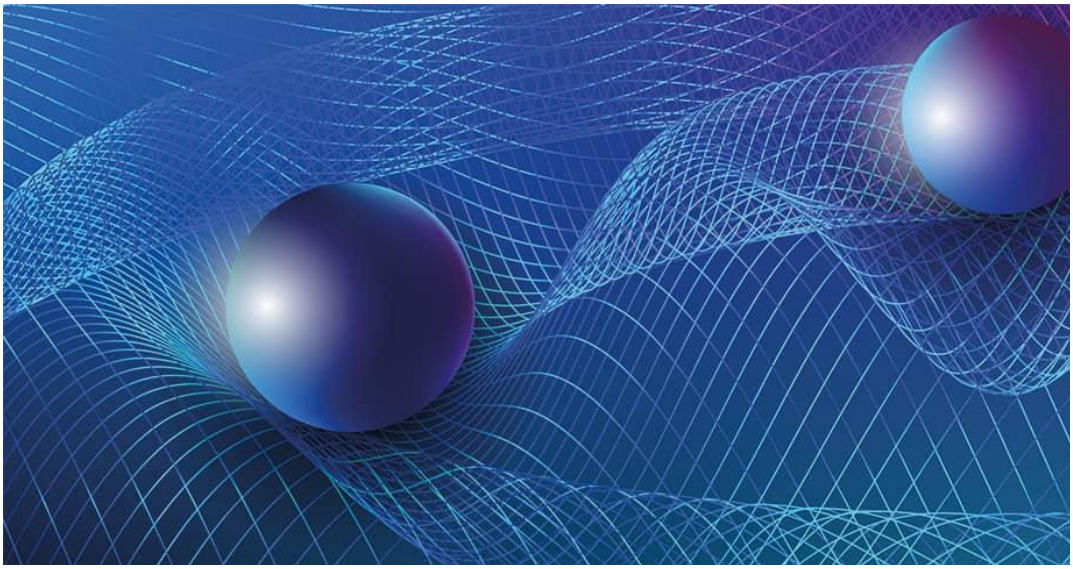

Present

Two days of history and epistemology of the foundations of Quantum Mechanics

April 14 et 15, 2023

Amphithéâtre Pierre-Gilles de Gennes, Université Paris Cité

On the occasion of the publication of

The Oxford Handbook of the History of Quantum Interpretations

Organizing Committee :

Jean-Jacques Szczeciniarz, Olival Freire, Joseph Kouneiher et Michel Paty

PROGRAMME

1er jour - 14 avril

8h:30-09:00 Welcom

09:00 – 11:00

Franck Laloë – Laboratoire Kastler Brossel, ENS Paris
A model of quantum collapse induced by Bohmian positions and gravity

Roger Penrose - University of Oxford
Classical and Quantum Reality, and the Collapse of the Wave-Function

Alain Aspect* (TBC) - l'Institut d'Optique (Université Paris-Saclay - CNRS) et professeur à l'École polytechnique

TBA

John Heilbron – Worcester College, Oxford

The history of the quantum debates

11:00 – 11:10 – Pause café

11:10 – 13:10

Helge Kragh – University of Copenhagen

Dead as a Doornail? Zero-Point Energy and Low-Temperature Physics in Early Quantum Theory

Christoph Lehner – Independent scholar

The Early Debates about the Interpretation of Quantum Mechanics

Christian Joas – University of Copenhagen

Foundations and Applications: The Creative Tension in the Early Development of Quantum Mechanics

Wayne Myrvold – The University of Western Ontario

Philosophical Issues Raised by Quantum Theory and its Interpretations

13:10 – 14:30 – Déjeuner

14:30 – 16:30

Daniela Monaldi – York University

The Evolving Understanding of Quantum Statistics

Osvaldo Pessoa Jr. – Universidade de São Paulo

The Measurement Problem

Michel Paty – Emeritus Research Director, CNRS
Einstein's Criticism of Quantum Mechanics

Guido Bacciagaluppi – Utrecht University
The Statistical Interpretation: Born, Heisenberg, and von Neumann, 1926-1927

16:30 – 16:40 – Pause café

16:40 – 18: 40

David Kaiser – Massachusetts Institute of Technology
Tackling Loopholes in Experimental Tests of Bell's Inequality

Bernadette Lessel – Max Planck Institute for the History of Science (MPIWG)
The Interpretation Debate and Quantum Gravity

Alexei Grinbaum – CEA-Saclay/Larsim, France
Quantum Information and the Quest for Reconstruction of Quantum Theory

Thomas Ryckman – Stanford University
Quantum Interpretations and 20th Century Philosophy of Science

Massimiliano Badino – University of Verona
Of Weighting and Counting: Statistics and Ontology in the Old Quantum Theory

2ème jour – 15 avril

09:00 – 11:00
Anja Jacobsen – KVUC, Denmark
Copenhagen and Niels Bohr

Flavio Del Santo – University of Vienna
The Foundations of Quantum Mechanics in Post-War Italy's Cultural Context

Jean-Philippe Martinez – Aachen University
Foundations of Quantum Physics in the Soviet Union

Sebastian Murgueitio Ramírez – University of Oxford
On How Epistemological Letters Changed the Foundations of Quantum Mechanics

11:00 – 11:10 – Pause café

11:10 – 13:10
Stefano Osnaghi – Archives Husserl, ENS, Paris
Bohr and the Epistemological Lesson of Quantum Mechanics

Olival Freire Jr – Universidade Federal da Bahia
Making Sense of the Century-Old Scientific Controversy over the Quanta

Kristian Camilleri – University of Melbourne
Orthodoxy and Heterodoxy in the Post-war Era

Giora Hon, University of Haifa, and Bernard Goldstein, University of Pittsburgh
Interpretation in Electrodynamics, Atomic Theory, and Quantum Mechanics

13:10 – 14:30 – Déjeuner

14:30 – 16:30
Jeffrey Barrett – UC Irvine
Pure Wave Mechanics, Relative States, and Many Worlds

Hervé Zwirn – ENS Paris-Saclay, France
Is QBism a Possible Solution to the Conceptual Problems of Quantum Mechanics

Jean-Jacques Szczeciniarz, Université Paris Cité, and **Joseph Kouneiher**, Côte d'Azur University
The Philosophy of Wholeness and the General and New Concept of Order: Bohm's and Penrose's Points of View

Valia Allori – Northern Illinois University
Spontaneous Localization Theories: Quantum Philosophy between History and Physics

16:30 – 16:40 – Pause café

16:40 – 18: 40
Otávio Bueno – University of Miami
The Non-Individuals Interpretation of Quantum Mechanics

Dennis Dieks – Utrecht University
Modal Interpretations of Quantum Mechanics

Jean Bricmont – Catholic University of Louvain
Einstein, Bohm, and Bell: A Comedy of Errors

Alexander Pechenkin – Lomonosov Moscow State University
The Statistical (Ensemble) Interpretation of Quantum Mechanics

Registration: https://www.archimedes-eca.org/colloque-quantum-interpretation

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