

UniLog - World Congress on Universal Logic

Workshop on Logical Quantum Structures

Rio de Janeiro – April 6 & 7

Keynote speakers: **Dennis Dieks**
Bob Coecke
Hector Freytes

April 6

- 9.10 – 9.50 Jonas Becker (Fronteira Sul Federal - University, Chapecó, SC Brazil)
Remarks on the Semantics for Non-Reflexive Logics
- 9.50 – 10.30 Sebastian Fortin (FCEyN UBA, CONICET) & Leonardo Vanni (FCEyN UBA)
Quantum Decoherence: A Logical Perspective
- 11.10 – 11.40 Federico Holik (Instituto de Física de la Plata, CONICET, Argentina)
Logic, Quantum Mechanics and Probability Theories
- 11.40 – 12.20 Newton da Costa (Universidade Federal de Santa Catarina) & Christian de Ronde (UBA-CONICET, Argentina - Center Leo Apostel, VUB, Belgium)
Non-Reflexive Foundation for Quantum Mechanics
- 12.20 – 13.00 Gabriel Catren (Laboratoire SPHERE - CNRS/Université de Paris 7 - France)
Quantum Ontology in the Light of Gauge Theories
- 14.30 – 15.10 Jairo Roldan (Departamento de Física, Universidad del Valle, Colombia)
Indivisibility, Complementarity, Ontology and Logic
- 15.10 – 15.40 Décio Krause (Universidade Federal de Santa Catarina)
Individuals and Quantum Theory
- 15.40 – 16.30 Hector Freytes (Department of Philosophy, Università deli Studi di Cagliari, Italia
- Departamento de Matemática FCEyA/CONICET, Argentina)
*The Phase Space in Intuitionistic Quantum Logic:
A Logic-Algebraic Approach*
- 17.00 – 18.00 Bob Coecke (Oxford University, England)
The logic of quantum mechanics - take II
- 18.00 – 19.00 Dennis Dieks (Utrecht University, Holland)
The Logic of Identity: Identical Particles in Quantum Mechanics

April 7

- 11.00 – 11.40 Julien Page (Laboratoire SPHERE - CNRS/Université de Paris 7 - France)
Heisenberg Indeterminacy Principle in the Light of Galois-Grothendieck Algebraic Theory
- 11.40 – 12.20 Olimpia Lombardi (FCEyN UBA - CONICET)
*Contextuality and Indistinguishability in Quantum Mechanics:
A Modal Ontology of Properties*
- 12.20 – 13.00 Bhupinder Singh Anand
A Suggested Mathematical Perspective for the EPR Argument

Organized by: **Décio Krause**
Christian de Ronde

