



Causal and Classical Concepts in Science:
IV International Workshop

**Classical concepts and metaphysical
presuppositions in quantum theory**

Carmen de la Victoria, Universidad de Granada
9-10 October, 2008

Program:

Thursday, October 9:

10.15 – 10.30 Registration

10.30 – 10.40 Henrik Zinkernagel (University of Granada)
Welcome and Introduction

10.40 – 11.50 Don Howard (University of Notre Dame):
"Entanglement, Complementarity, and Decoherence:
Bohr on the Classical and the Macroscopic."

Chair: Henrik Zinkernagel

11.50 – 12.20 Coffee break

12.20 – 13.30 Svend E. Rugh (Symposion, Copenhagen)
"Some worries about the physical foundation of time in
the early (quantum) universe"

Chair: Albert Solé (Complutense University of Madrid)

13.30 – 15.30 Lunch break

15.30 – 16.40 Mario Bacelar Vicente (University of Seville)
"Temporality in QED: a perspective on the relation
between classical and quantum electrodynamics"

Chair: Pedro Sánchez (Complutense University of Madrid)

16.40 – 17.00 Coffee break

17.00 – 18.10 Klaas Landsman (Radboud University Nijmegen)
"Intuitionistic quantum logic"

Chair: Carl Hofer (ICREA/Autonomous University of Barcelona)

Friday, October 10:

9.30 – 10.40 Jesús Martínez Linares (University of Seville):
“Quantum Information at the Quantum-Classical Border”

Chair: Maria Cruz Bósca (University of Granada)

10.45 – 11.55 Brigitte Falkenburg (University of Dortmund):
“Complementarity in Quantum Optics”

Chair: Mauricio Suárez (Complutense University of Madrid)

11.55 – 12.20 Coffee break

12.20 – 13.30 Iñaki San Pedro García (University of the Basque country):

“A Common Cause Model for EPR Correlations”

Chair: Fernanda Samaniego (Complutense University of Madrid)

13.30 – 15.30 Lunch break

15.30 – 16.40 Holger Bech Nielsen (University of Copenhagen)
“A backward causation model and the measurement problem”

Chair: Svend E. Rugh (Symposion, Copenhagen)

16.40 – 17.00 Coffee break

17.00 – 18.10 Jos Uffink (Utrecht University)
“On the analogy between thermodynamics and quantum entanglement”

Chair: Isabel Guerra (Complutense University of Madrid)

20.30 Workshop dinner at “Alhambra Palace”