

The quantum state as the memory of a quantum system

A physical inquiry and a metaphysical appraisal

Date

01-03 May, 2014

Location

01 May: Anthropole 2064

02-03 May: Unithèque, Conference Room in the Library (BCU)

Keynote Speakers

Guido Bacciagaluppi (Aberdeen)

Jeremy Butterfield (Cambridge, UK)

Nicolas Gisin (Geneva)

Nino Zanghì (Genova)

Thursday 01 May (ANTH 2064)

| | | |
|-------|------------------------|--|
| 17:00 | Esfeld/Savona/Vassallo | Welcome address |
| 17:15 | Nicolas Gisin | Quantum nonlocality and realistic physics theories |
| 18:15 | Jeremy Butterfield | Classifications of quantum states |
| 19:30 | | Dinner (Restaurant de Dorigny) |

Friday 02 May (Unithèque)

| | | |
|-------|---------------------|---|
| 09:00 | Mario Hubert (UNIL) | Are Classical States Lagrangian or Hamiltonian? |
| 10:00 | Pui Him Ip (London) | The ontology of Hamilton-Jacobi theory as an argument in favour of a dispositionalist view of the quantum state |
| 11:00 | | Coffee Break |
| 11:30 | Michael Esfeld | Primitive ontology first |
| 12:30 | | Lunch (on campus) |
| 14:00 | Nino Zanghì | The big wave function and the small wave function |

Organizers

Michael Esfeld (UNIL)

Vincenzo Savona (EPFL)

Antonio Vassallo (UNIL)

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|-------|-------------------------|--|
| 15:00 | Davide Romano (UNIL) | Decoherence and Bohmian Mechanics |
| 16:00 | | Coffee Break |
| 16:30 | Vincent Lam (UNIL) | Primitive ontology and unitary inequivalence |
| 17:30 | Andrea Oldofredi (UNIL) | Bohmian-type QFT and Malament/Haag no-go theorem |
| 19:30 | | Dinner (Le Pinocchio) |

Saturday 03 May (Unithèque)

| | | |
|-------|-------------------------|--|
| 09:00 | Guido Bacciagaluppi | The misleading equivalence of decoherence and branching |
| 10:00 | Matthias Egg (UNIL) | The role of the quantum state in the GRW matter density theory |
| 11:00 | | Coffee Break |
| 11:30 | Antonio Vassallo (UNIL) | What is a quantum-gravitational state? |
| 12:30 | Vincenzo Savona | Concluding Remarks |
| 13:00 | | Lunch (Restaurant de Dorigny) |

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Practical Information

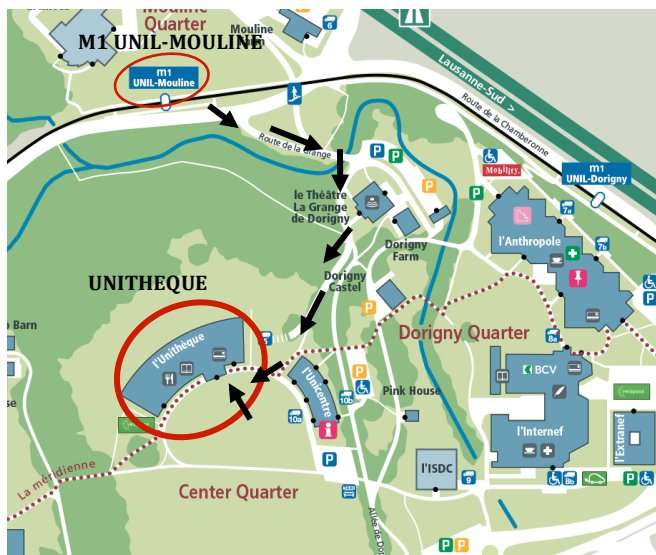
How to reach the university campus:

- From the Lausanne railway station *Lausanne-Gare*:
Take the metro M2 going to *Croisettes*, change at the station *Lausanne-Flon*.
Then take the metro M1 going to *Renens-Gare*.
Get off at *UNIL-Mouline*.
- From the Renens railway station *Renens-Gare*:
Take the metro M1 going to *Lausanne-Flon*.
Get off at *UNIL-Mouline*.

The conference room is in the Unithèque building (see map), within the university library (BCU) on the upper floor of the library (follow the signs).

On Friday, the dinner will take place at the restaurant *Le Pinocchio*, which is in the inner city; we will go there together.

Campus map:



Organizers

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Vincenzo Savona (EPFL)
Antonio Vassallo (UNIL)

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