

## **Is dualism Bohr's answer to the measurement problem?**

Contribution to the workshop: "What exists in the quantum world?"  
International Academy Traunkirchen, Austria, July 2010

Stefano Osnaghi  
CREA- École Polytechnique, Paris

Bohr's approach to quantum mechanics is usually stigmatized because its consistency seems to require an artificial divide between microscopic and macroscopic domains. This reading of Bohr's view has two implications. On the one hand, we are left with microscopic entities whose ontological status is unclear. On the other hand, we are naturally led to attempt to "complete" Bohr's approach by establishing the consistency of the standard interpretation *without* relying on dualistic assumptions.

I will sketch a different reading of Bohr's approach, in which there are no dualistic assumptions. Based on this reading, I will propose to investigate how we should reinterpret ontological issues, and, more specifically, how we should understand the scope, meaning and fundamental implications of the research programs that aim at providing a quantum account of the macroscopic world.