



## Solvay Colloquium

### ***“RECONSIDERING THE 1927 SOLVAY CONFERENCE”***

## **Professor Antony Valentini**

Centre de Physique Théorique - Marseille  
France

### **Abstract**

“We reconsider the crucial 1927 Solvay conference in the context of current research in the foundations of quantum theory. Contrary to folklore, the interpretation question was not settled at this conference and no consensus was reached; instead, a range of sharply conflicting views were presented and extensively discussed. Today, there is no longer an established or dominant interpretation of quantum theory, so it is important to re-evaluate the historical sources and keep the interpretation debate open. The proceedings of the conference contain much unexpected material. After providing a general overview, we shall focus (a) on the extensive discussions of de Broglie's pilot-wave theory, which de Broglie presented for a many-body system, including the much misunderstood critique by Pauli, and (b) on Born and Heisenberg's presentation of a 'quantum mechanics' apparently lacking in wave function collapse or fundamental time evolution. This talk is based on our English translation and commentary of the proceedings of the conference, 'Quantum Theory at the Crossroads' (forthcoming with Cambridge University Press, ISBN: 9780521814218).”

**Tuesday 18 December 2007 at 16h00**

*COFFEE AND TEA WILL BE SERVED AT 15H45 IN FRONT OF THE SOLVAY ROOM*

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