



Contribution ID: 11

Type: **not specified**

From Quantum Discussions with Basil and David Bohm in the 1960s and 70s. (By Zoom)

Monday 30 June 2025 16:30 (40 minutes)

When Basil Hiley and I were both on the faculty at Birkbeck College London, he in physics and I in mathematics, in the late 1960s, we began to have frequent (weekly?) discussions, often joined by David Bohm, on the foundations of quantum mechanics, most particularly on the puzzling phenomenon of the collapse of the wave-function upon measurement. On Basil's side, the discussions eventually led to his broad-ranging book with Bohm:

The Undivided Universe: An Ontological Interpretation of Quantum Theory.

This was a great achievement, but my own interests in general relativity eventually took me in a different direction, where the curious way in which nature allows the basic principle of general relativity—namely the Galilei-Einstein Principle of equivalence between a local gravitational field and an accelerating coordinate frame—is made consistent with quantum theory, this leading to a very different view of the collapse of the quantum wave-function.

Presenter: Prof. PENROSE, Roger (University of Oxford)