



SCHOOL OF PHILOSOPHY

Philosophy and Quantum Physics

8 week series of lectures and discussions about recent and older discoveries in physics and their philosophical implications. Quantum Physics specifically is not well understood; some of its predictions when examined more closely run very much counter to "common sense" and are apparently bizarre. These are however, very philosophically significant if the predictions are true. The objective of these classes is to look more deeply at this subject and search for a deeper understanding. Some of the main topics we will encounter are:

Course Content: A summary of the history of discoveries in physics and science which have lead to the present situation and why the radical shift in paradigm was necessary to make sense of it all.

- The wave particle duality - what is the ultimate reality behind light and matter?
- The Heisenberg uncertainty principle - the consciousness of the observer seems to intrude into to the physical world, a fact which was completely insignificant in the previous Newtonian view. What does it mean?
- The Schrödinger wave equation - this apparently abstract mathematical creation has a very intimate connection with our everyday physical world. What is its significance?
- Quantum Entanglement - the ultimate connectedness of all matter - Einstein was a great skeptic about this and used all his intellect to argue against it, but the predictions of quantum physics triumphed and proved him wrong.

Course Cost: \$100 (\$50 for students currently enrolled in a regular School Course)

Course Location: School of Philosophy, Toronto
29 Madison Ave. (near Bloor/Spadina)

Course Dates: Mondays for 8 evenings from 7 – 9 pm
beginning 30th January, 2012