Nearly ninety years after the complete mathematical formulation of nonrelativistic quantum mechanics there are still many competing interpretations. This talk will attempt to identify the philosophical issues that are at the root of the controversies and to present a formulation of the theory, favored by the author, which puts the main current interpretations into proper perspective.

Pierre C. Hohenberg is an emeritus professor in the Physics Department at NYU. His research interests include condensed matter physics, statistical physics, and non-equilibrium phenomena, and he is one of the originators of Density Functional Theory and of the Dynamical Scaling Theory of critical phenomena.