This treatise gives a concise exposition of the fundamental principles of quantum mechanics and their interpretation, avoiding the use of complicated mathematical methods, and the solution of specific proper value problems. The main mathematical device is the geometrical treatment of abstract Hilbert space. The statistical interpretation of quantum mechanics is discussed, the notions of pure and of mixed quantum mechanical assemblies are analyzed, and finally composite systems are studied in detail. This leads to an interesting exposition of the nature of correlations in quantum mechanics, and more specifically of the relations of the observer and the observed. A concrete and very instructive example of these general considerations is given by discussing the conditions in a Stern-Gerlach experiment.

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