FOUNDATIONS

The first seven chapters which open this book are concerned with concepts and analytical machinery which are used to understand and make predictions about the statistical behavior of physical systems. These basic ideas include: measurement and meaning, space-time, probability, information, the principle of maximum entropy, quantum processes and distribution functions, and catastrophe (in the mathematical sense). The opening chapter by Professor Lamb, which is reprinted from proceedings of an earlier (1973) conference, examines the approach to thermodynamic equilibrium (and other stationary states). This topic remains an active area of investigation, and is a theme developed further throughout the book.