The book comprises a series of author's personal texts on various subjects in Theoretical Physics. Some are easy writings, like those on our world's numbers, main physical principles, numerical computation, probabilities, general laws of motion. Others deal with old subjects, like celestial mechanics, particles' scattering, fluids, many-body dynamics, the Thomas-Fermi atom, superfluidity, liquids. New insights are obtained from old problems, included in these Lectures, like the relation between quantization and the non-inertial motion, or the curved spaces, the connection between teleportation and the chemical reactivity, the theory of the laser, the van der Waals isotherms and condensation of matter. Modern issues like the quanta of electrical conductance or the hadronization of the quark-gluon plasma could be described by "elementary" Physics; or we can arrive at unexpected, strange things, like densitons in classical fluids, all included here. The book aims at conveying a certain, particularly attractive, worthiness of Physics.

Marian Apostol

Marian Apostol is professor of Theoretical Physics at Magurele-Bucharest. He collects in this book a series of personal Lectures on Physics which, he believes, are very different from what people would normally expect from a professor.