**WALTER THIRRING: Lehrbuch der Mathematischen Physik 3.
Quantenmechanik von Atomen und Molekülen**

Springer, Wien—New York, 1979, 263 pages

“Die unendlich vielen Richtungen eines unendlichdimensionalen Raumes bieten erstaunliche Aspekte. Sie gebieten, sorgfältig zu untersuchen, was sich vom Dreidimensionalen direkt übertragen lässt und woran man scheitert”. These words of the textbook of the Professor of the University of Vienna expresses the programme of his Volume. Its size and the presented applications cover the contents of an everyday university textbook for quantum mechanics. What makes this book different, is its mathematical rigour and mathematical elegance. “Smartness is meant for tailors, not for physicists”, — said THIRRING’s great compatriot, LUDWIG VON BOLTZMANN. THIRRING apparently disagrees with this saying. In the presentation he follows the track of JOHN VON NEUMANN, but he makes use of the recent developments in the mathematics of sets, Hilbert space, groups, so he has become able to offer more compact (and more abstract) proofs for the known theorems and results.

An average college student will start learning quantum mechanics from one of the several messy intuitive textbooks which make use of history and dialectics. (Only high-skilled mathematicians should choose this book as introduction to quantum theory.) But after the introductory years some of them will be interested in the pure logical structure of the theory, and they will enjoy the brilliance of the mathematical pearls offered by this book.

G. MARX