

Reviews

Günter SCHULZ: *Paradoxa aus der Optik*. Johann Amrosius Barth, Leipzig 1974, pp. 112, figs. 37.

A paradox is known to be a statement that is seemingly contradictory or opposed to common sense and yet is perhaps true. A paradox in physics may be seen from an insufficient and superficial knowledge of physical law. In particular — as stated in the Introduction (called Part A) — the overwhelming flood of information contributes to a superficial knowledge of even the most important phenomena, leaching aside the heart of the matter. Hence, the natural human sense of critical analysis of the relations between individual phenomena seems to become somewhat dull in our times. Is it really so?

The book by G. SCHULZ gives the reader an excellent opportunity to test the reliability of his knowledge in the field of non-relativistic optics, in the optical theory of information, holography, interferometry, electrodynamic theory of radiation in particular.

Besides Part A (Introduction), the book contains two main parts (Part B and Part C). In Part B the author shows in a number of examples how by

an apparently just reasoning — even consistent with common opinions — it is possible to become manoeuvred into the field of nonsense. If the reader does not find the right solution by himself he may find an extensive and versatile elucidation of the discussed problems in Part C. The book by G. SCHULZ requires a considerable theoretical preparation on the part of the reader, but may be recommended to the advanced students (though certain fragments of the book may appear difficult) as well as to the specialists of considerable experience in optics. The *Paradoxa aus der Optik* may become an extremely interesting material for the student seminars, simulating through studies on these problems an opportunity to verify the ability of critical thinking.

The book includes also an appendix and references to 110 publications.

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