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both grow with increasing energy.

The section on weak interactions contains a brief resume of the Weinberg-Salam model in which a partial-wave unitarity argument is given for the existence of the neutral intermediate boson  $Z^0$ . The mass of the  $Z^0$  is incorrectly stated to be twice the mass of the charged intermediate boson  $W^\pm$ . The Higgs boson, whose existence is required by the same unitarity argument, is not mentioned. The theory is ascribed to Steven Weinberg in 1964 (1967 is correct), but the reference does not exist: it turns out to be a corrupted reference to the work of Abdus Salam and John Ward.

As these examples suggest, *Elementary Particle Physics* is so consistently unreliable that no student should be forced to struggle with it. I may suggest some alternatives. For a one-year course, the books by Steven Gasirowicz and by Martin Perl, though somewhat dated, are more scholarly and authoritative, and an excellent short introduction is provided by Donald Perkin's slender volume.

CHRIS QUIGG

Fermi National Accelerator Laboratory  
Batavia, Illinois

## book notes

**Patent and Trademark Tactics and Practice**. D. A. Burge. 210 pp. Wiley-Interscience, New York, 1980. \$15.95

The inventor of a new device or process often finds himself at a loss when he decides to obtain a patent to protect his newly developed "intellectual property." Here is a book that should fill that need. Written by a practicing patent attorney, *Patent and Trademark Tactics and Practice* describes how to select a patent attorney, what can be patented, how to apply for a patent, how to keep invention records, how to protect trade secrets and tips on copyrights. Three appendices contain sample utility and design patents as well as a trademark registration.

**Toward the Endless Frontier: History of the Committee on Science and Technology, 1959-79**. 1173 pp. US Government Printing Office, Washington, D.C., 1980. \$11.00

This account of the political judgments behind twenty years of the most rapid scientific development in history—from the Sputnik scare to today's search for advanced energy technologies—reads less like a congressional report than a popular history. Ken Hechler, author of *The Bridge of Remagen*, former professor of political sci-

ence and history at Columbia, Princeton and Marshall Universities and member of the Committee on Science and Technology for 18 years, has collected a mass of anecdotal as well as factual information on the doings of the committee and has condensed it into a blow-by-blow account. Former Ohio congressman, Charles A. Mosher found it "more fascinating than I could have hoped, it abounds in meaningful incidents and details of which I was not aware... I have a... better understanding of the inner dynamics and broader influence of our committee's efforts."

—SCA

## new books

### Instrumentation and Techniques

**Advances in X-Ray Analysis** (Proc. of a conf., Denver, Colorado, July-August 1979). J. R. Rhodes, C. S. Barrett, D. E. Leyden, J. B. Newkirk, P. K. Predecki, C. O. Ruud, eds. 406 pp. Plenum, New York, 1980. \$45.00

**Radioactivity and Its Measurement** (Second Edition). W. B. Mann, R. L. Ayres, S. B. Garfinkel. 291 pp. Pergamon, Elmsford, N.Y., 1980 (first ed., 1966). \$12.50

**Photo-Electronic Image Devices** (Proc. of symp., London, UK, September 1978). B. L. Morgan, D. McMullan, eds. 558 pp. Academic, London, UK, 1980. \$75.00

**Fitting Equations to Data: Computer Analysis of Multifactor Data** (Second Edition). C. Daniel, F. S. Wood. 476 pp. Wiley, New York, 1980. \$21.95

**Fluorescent Lamp Phosphors: Technology and Theory**. K. H. Butler. 351 pp. Pennsylvania State U., University Park, Pa., 1980. \$39.50

**Metrology and Fundamental Constants** (Proc. of a school, Varenna, Italy, July 1976). A. F. Milone, P. Giacomo, eds. 845 pp. North-Holland, New York, 1980. \$124.50

**Modern X-Ray Analysis on Single Crystals**. P. Luger. 325 pp. Walter de Gruyter, New York, 1980. (Price not stated)

**Electron-Beam Technology in Micro-electronic Fabrication**. G. R. Brewer, ed. 373 pp. Academic, New York, 1980. \$36.50

**The Physics and Chemistry of Liquid Crystal Devices**. G. J. Sprokel, ed. 352 pp. Plenum, New York, 1980. \$42.50

### Heat, Thermodynamics and Statistical Physics

**Statistical Physics—"Statphys 13," Part 2** (Proc. of a conf., Haifa, Israel, August 1977). D. Cabib, C. G. Kuper, I. Riess, eds. 698 pp. Hilger, Bristol, UK, 1978. \$49.50

**Statistical Physics, Part 1** (Third Edition). L. D. Landau, E. M. Lifshitz. 578 pp. Perga-