

chapter titled "Contextuality," where the reader will find a criticism of "counterfactual realism and counterfactual compatibility."

Part III deals with quantum dynamics and information: After a chapter dealing with symmetries and time evolution, Peres explores such varied and recent topics as the role of information-theoretic entropy in quantum theory, quantum cryptography and quantum teleportation. The chapter on semiclassical methods cov-

ers the correspondence principle, Feynman path integrals, Wigner distributions and coherent states. The next chapter contains a clear and interesting discussion of chaos and irreversibility in quantum mechanics.

I had eagerly looked forward to the last chapter, dealing with the measurement process, but I must confess a certain disappointment. Peres essentially limits his discussion to various measurement models he himself has proposed. For example, without

giving any detailed reasons, he dismisses in half a page the "many-worlds" interpretation, and he never mentions Klaus Hepp's beautiful discussion of a quantum mechanical system "measured" by another, infinite-dimensional system (Helv. Phys. Acta 45, 237, (1972)).

On the whole, though, the reader will find lots of interesting things in the book, if the library can be persuaded to buy it.

MEINHARD E. MAYER
University of California, Irvine

NEW BOOKS

Energy and Environment

12th NREL Photovoltaic Program Review. AIP Conference Proceedings 306. Proc. Mtg., Denver, Colo., October 1993. R. Noufi, H. S. Ullal, eds. AIP, New York, 1994. 600 pp. \$150.00 *hc* ISBN 1-56396-315-9

Preservation of Near-Earth Space for Future Generations. J. A. Simpson, ed. Cambridge U. P., New York, 1994. 247 pp. \$79.95 *hc* ISBN 0-521-44508-6

Fluids

Life in Moving Fluids. Second revised edition. S. Vogel. Princeton U. P., Princeton, N. J., 1994. 467 pp. \$49.50 *hc* ISBN 0-691-03485-0

Plasma Physics: An Introduction to the Theory of Astrophysical, Geophysical and Laboratory Plasmas. P. A. Sturrock. Cambridge U. P., New York, 1994. 335 pp. \$64.95 *hc* ISBN 0-521-44350-4

Thermodynamics of Flowing Systems With Internal Microstructures. Oxford Engineering Science Series 36. A. N. Beris, B. J. Edwards. Oxford U. P., New York, 1994. 683 pp. \$95.00 *hc* ISBN 0-19-507694-X

Geophysics

Atmospheric Convection. K. A. Emanuel. Oxford U. P., New York, 1994. 580 pp. \$59.95 *hc* ISBN 0-19-506630-8

History and Philosophy

Biographical Encyclopedia of Scientists, Vols. 1 and 2. Second edition. J. Daintith, S. Mitchell, E. Tootill, D. Gjertsen. IOP, Philadelphia, Penna., 1994. 1075 pp. \$105.00 *hc* ISBN 0-7503-0287-9

The Creation of Scientific Effects: Heinrich Hertz and Electric Waves. J. Z. Buchwald. U. Chicago P., 1994. 482 pp. \$32.95 *pb* ISBN 0-226-07888-4

The Eye of Heaven: Ptolemy, Copernicus, Kepler. The American Institute of Physics Masters of Modern Physics Series. O. Gingerich. AIP, New York, 1993. 442 pp. \$24.95 *hc* ISBN 0-88318-863-5

Handbook of Science and Technology Studies. S. Jasanoff, G. E. Markle, J. C. Petersen, T. Pinch, eds. Sage, Thousand Oaks, Calif., 1995. 820 pp. \$85.00 *hc* ISBN 0-8039-4021-1

SCIENTIFIC WORD SCIENTIFIC WORKPLACE

Word Processing and Computational Technologies Converge!

CALL TODAY FOR A FREE BROCHURE!

STUDENT EDITION AND SITE LICENSES AVAILABLE

Scientific WorkPlace is a trademark of TCI Software Research. Maple is a registered trademark of Waterloo Maple Software.

- Mathematics and text completely integrated
- Documents saved as L^AT_EX, REV_TE_X or AMS-L^AT_EX
- Includes a faster Windows-based T_EX system
- Support for TrueType and Type 1 fonts
- All Windows-compatible printer devices supported
- Table editor, style editor and multiple graphic formats
- Scientific WorkPlace has Scientific Word and a special version of Maple[®] Computer Algebra System built-in
- Use resulting computations in subsequent calculations
- 60-day, no-risk, money-back guarantee

TCI SOFTWARE RESEARCH
An International Thomson Publishing Company

1190 FOSTER ROAD • LAS CRUCES, NM 88001
TEL: (505) 522-4600 • FAX: (505) 522-0116
800-874-2383
OR VIA INTERNET: sales@tcisoft.com

Circle number 24 on Reader Service Card