

Nonetheless, this book is a stimulating, worthwhile read for either scientist or layman.

ROBERT H. MARCH
University of Wisconsin at Madison

book note

Infinite Vistas: New Tools for Astronomy

Edited by James Cornell and John Carr.
xvii + 302 pp. Scribner's, New York, 1985.
\$18.95

The Hubble Space Telescope, whose launch into orbit has been delayed by the recent *Challenger* shuttle disaster, is only one of several important projects that will be extending the frontier of research in observational astronomy in the 1990s. *Infinite Vistas*, written for lay readers, includes contributions from eleven astronomers that range from discussions of techniques such as speckle imaging and the charge-coupled devices that have prolonged the life of an older generation of telescopes to new-technology telescopes, with effective diameters two and three times that of the mirror at Palomar Observatory, that will revolutionize ground-based astronomy. Another proposal has a globe-girdling radioastronomy system with an "antenna" equal to the diameter of the Earth. Projects that will take advantage of the ability to observe without the hindrances imposed by the Earth's atmosphere—limitations in resolution and in wavelength—include the Gamma Ray Observatory, the Advanced X-Ray Astrophysics Facility, an orbiting interferometric array of optical telescopes known as the Coherent Optical System of Modular Imaging Collectors, an Advanced Solar Observatory, the Space Infrared Telescope Facility, the Infrared Space Observatory and the Cosmic Background Explorer. Many of the exciting developments in astrophysics over the past quarter-century took place because astrophysical sources of radiation whose wavelength regions were formerly inaccessible from the ground could be studied in many cases with modest equipment above the atmosphere. This readable book encourages us to think that the view will be even better in future.

—PER H. ANDERSEN

new books

Astronomy, cosmology and space physics

Annual Review of Astronomy and Astrophysics, Vol. 24. G. Burbidge, ed. 627 pp. Annual Reviews, Palo Alto, Calif., 1986. ISBN 0-8243-0924-3. \$44.00. *Compendium*



it's this... or LAKE SHORE

For Cryogenic Temperature Accuracy.

Trusting expired cryogenic sensor calibrations? Or calibration data from a jury-rigged system? Lake Shore sensor recalibrations can renew your measurement confidence.

Lake Shore's uniquely-equipped cryogenic cal lab is maintained traceable in accord with MIL-STD-45662. Calibration runs are computer-controlled, scientist-supervised. We automatically test for stability, double intercompare standards & unknowns, exchange polarities to negate thermal emfs, and certify the results in a complete documentation package.

With Lake Shore calibrations you get accuracy you can rely on...rather than data you can only cross your fingers over. Service is prompt, efficient, economical...because at Lake Shore, we know cryogenics COLD!

Cryogenic Thermometry • Instrumentation • Calibrations

 **Lake Shore**
Cryotronics, Inc.

64 E. Walnut St., Westerville, OH 43081 • (614) 891-2243

Europe: Cryophysics: Witney, England • Jouy en Josas, France
Darmstadt, W. Germany • Geneva, Switzerland

Japan: Niki Glass Co., Takanawa, Tokyo • India: Goodwill Cryogenics, Bombay

Circle number 30 on Reader Service Card

PHYSICS TODAY / JANUARY 1987