

lengths “become negative” could have been caught by better editing. More important are the oversights. Consider Rigden’s take on special relativity, which he calls a “super theory.” He argues that Einstein’s 1905 relativity paper “radiates perfection,” that it “exudes simplicity.” Yet for many physicists, the paper was remarkably difficult to appreciate. Einstein himself acknowledged that he had written it in a needlessly complicated way. It even includes the erroneous claim that a clock on Earth’s equator runs slower than an identical polar clock (see the article by Alex Harvey and Engelbert Schucking, *PHYSICS TODAY*, March 2005, page 34, and Letters, September 2005, page 12).

Also, as in many other books, some factors that had the most influence on Einstein, such as Hippolyte Fizeau’s experiment on the convection of light by moving water, and David Hume’s philosophy, are not mentioned at all. Moreover, readers should be told that prior to 1905 influential theorists such as Ernst Mach, Karl Pearson, and Henri Poincaré had already argued cogently that time is not absolute. Einstein had read their works. Mach, for one, is mentioned in the book only as having disbelieved in atoms; thus he appears merely as someone Einstein proved wrong. Likewise, there is scarce mention of the findings prior to 1905 that had already convinced most chemists and physicists to accept the existence of atoms.

Einstein 1905 is not for specialists or historians. But for amateurs and younger readers, it’s a fine introduction to Einstein’s contributions. Also, it may be a welcome addition in any modern physics course for nonmajors. In 1921, Einstein commented, “It strikes me as unfair, and even in bad taste, to select a few individuals for boundless admiration, attributing superhuman powers of mind and character to them.” Today, we still wait for good popular science books to repair this circumstance.

Alberto Martínez
University of Texas
Austin

New Books

Astronomy and Astrophysics

Annual Review of Astronomy and Astrophysics. Vol. 43. R. Blandford, G. Burbidge, J. Kormendy, E. van Dishoeck, eds. Annual Reviews, Palo Alto, CA, 2005. \$86.00 (957 pp.). ISBN 0-8243-0943-X

The IAU Resolutions on Astronomical Reference Systems, Time Scales, and Earth Rotation Models: Explanation



CRYOMAGNETICS, INC.
INNOVATIVE SUPERCONDUCTING MAGNET SOLUTIONS

Breaking New Ground...

- World's first commercial HTS (BSCCO-2223) superconducting magnet system for a synchrotron tube application. (2003)
- World's first commercial 7T liquid oxygen-free superconducting magnet system for Ion Cyclotron Resonance research. (2003)
- World's first superconducting magnet in space. (2005)
- World's first stacked pancake coil wound with long lengths of 2nd Generation HTS (YBCO) material. (2005)
- Latest releases including our new superconducting magnet power supply! (2005)

...Keeping You Ahead

1006 Alvin Weinberg Drive • Oak Ridge, TN 37830 • Phone: (865) 482-9661
Fax: (865) 482-1263 • sales@cryomagnetics.com • www.cryomagnetics.com

See www.pt.ims.ca/7374-27

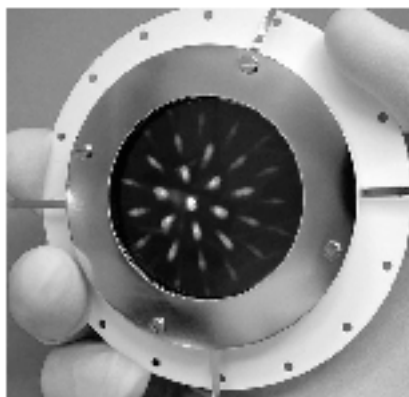
**For the Ultimate
in Electromagnetic Measurements**

- Laboratory Applications
- Biomagnetic Measurements
- Geophysical Exploration
- Nondestructive Evaluation
- Magnetic Microscopy
- Custom SQUID Systems
- Custom Cryogenics

TRISTAN TECHNOLOGIES

 8400 Chabers Lane, Suite 100 • 1495, San Diego, CA 92121
Tel: (619) 570-0710 • Fax: (619) 570-3799 • info@tristan-tech.com

See www.pt.ims.ca/7374-28



**Fastest
and getting Faster**

El Vu Technologies supplies the fastest, most versatile particle detectors to the world's leading research labs.

Download Our Catalog!

www.el-mul.com

Tel: +44 (0)1865 202300 Fax: +44 (0)1865 202301
Email: info@el-mul.com



You Can Detect
the Difference

El-Mul

**Electron & Ion
Detection Solutions**

See www.pt.ims.ca/7374-29

ICE

oxford

- Dilution Refrigerator Systems
- Spectroscopy Systems
- CF Cryostats
- ³He Systems
- VTI's

• **Cryo**_{bitz}
catalogue for Cryogenic Spares

• Fully integrated Cryo Magnetic Systems with sample environments to suit all your needs

ICEoxford®
www.iceoxford.com
 E-mail: info@iceoxford.com
 Phone: +44 (0)1865 202300
 APS Stand #218

and Implementation. G. Kaplan. *US Naval Observatory Circular 179*. US Naval Observatory, Washington, DC, 2005. \$10.00. (104 pp.). PDF free online at http://aa.usno.navy.mil/publications/docs/Circular_179.html

Interacting Binaries: Accretion, Evolution, and Outcomes. L. Burderi et al., eds. *AIP Conference Proceedings 797*. Proc. mtg., Cefalù, Sicily, July 2004. AIP, Melville, NY, 2005. \$185.00 (670 pp.). ISBN 0-7354-0286-8

Maps of the Cosmos. M. Colless, L. Staveley-Smith, R. Stathakis, eds. *International Astronomical Union Symposium 216*. Proc. symp., Sydney, Australia, July 2003. International Astronomical Union, Paris, and Astronomical Society of the Pacific, San Francisco, 2005. \$95.00 (411 pp.). ISBN 1-58381-202-4

Non-Accelerator Astroparticle Physics. R. A. Carrigan Jr, G. Giacomelli, N. Paver, eds. Proc. sch., Trieste, Italy, July–Aug. 2004. World Scientific, Hackensack, NJ, 2005. \$104.00 (317 pp.). ISBN 981-256-316-4

The Physics and Chemistry of the Interstellar Medium. A. G. G. M. Tielens. Cambridge U. Press, New York, 2005. \$85.00 (495 pp.). ISBN 0-521-82634-9

Ultraviolet Atlas of the Arcturus Spectrum, 1150–3800 Å. K. Hinkle, L. Wallace, J. Valenti, T. Ayres. Astronomical Society of the Pacific, San Francisco, 2005. \$77.00 (354 pp.). ISBN 1-58381-204-0

Atomic and Molecular Physics

Intermolecular Forces and Clusters I. D. J. Wales, ed. *Structure and Bonding 115*. Springer-Verlag, New York, 2005. \$199.00 (206 pp.). ISBN 3-540-28194-0

Theoretical Atomic Physics. 3rd. ed. H. Friedrich. Springer-Verlag, New York, 2006 [1998]. \$79.95 (506 pp.). ISBN 3-540-25644-X

Biological and Medical Physics

Advanced Image Processing in Magnetic Resonance Imaging. L. Landini, V. Positano, M. F. Santarelli, eds. *Signal Processing and Communications 27*. CRC Press/Taylor & Francis, Boca Raton, FL, 2005. \$139.95 (611 pp.). ISBN 0-8247-2542-5

Medical Image Analysis Methods. L. Costaridou, ed. *The Electrical Engineering and Applied Signal Processing Series*. CRC Press/Taylor & Francis, Boca Raton, FL, 2005. \$149.95 (489 pp.). ISBN 0-8493-2089-5

Radiation Physics for Medical Physicists. E. B. Podgoršak. *Biological and Medical Physics, Biomedical Engineering*. Springer-Verlag, New York, 2006. \$139.00 (437 pp.). ISBN 3-540-25041-7

Chemical Physics

Activated Carbon Adsorption. R. C. Bansal, M. Goyal. CRC Press/Taylor & Francis, Boca Raton, FL, 2005. \$189.95 (497 pp.). ISBN 0-8247-5344-5

Solid State Chemistry: An Introduction. 3rd ed. L. E. Smart, E. A. Moore. CRC Press/Taylor & Francis, Boca Raton, FL, 2005 [1995]. \$69.95 *paper* (407 pp.). ISBN 0-7487-7516-1

Computers and Computational Physics

First-Principles Calculations in Real-Space Formalism: Electronic Configurations and Transport Properties of Nanostructures. K. Hirose, T. Ono, Y. Fujimoto, S. Tsukamoto. Imperial College Press, London, 2005. \$68.00 (253 pp.). ISBN 1-86094-512-0

Numerical Methods in Engineering with MATLAB®. J. Kiusalaas. Cambridge U. Press, New York, 2005. \$85.00 (426 pp.). ISBN 0-521-85288-9

Quantum Computation and Quantum Communication: Theory and Experiments. M. Pavičić. Springer-Verlag, New York, 2006. \$110.00 (221 pp.). ISBN 0-387-24412-3

Condensed Matter Physics

Electronic States in Crystals of Finite Size: Quantum Confinement of Bloch Waves. S. Y. Ren. *Springer Tracts in Modern Physics 212*. Springer-Verlag, New York, 2006. \$149.00 (204 pp.). ISBN 0-387-26303-9

Encyclopedia of Condensed Matter Physics. Vols. 1–6. F. Bassani, G. L. Liedl, P. Wyder, eds. Elsevier Academic Press, Oxford, UK, 2005. \$1,895.00 *set* (2744 pp. *set*). ISBN 0-12-227610-8

Finite Size Effects in Correlated Electron Models: Exact Results. A. A. Zvyagin. Imperial College Press, London, 2005. \$88.00 (367 pp.). ISBN 1-86094-503-1

Multigroup Equations for the Description of the Particle Transport in Semiconductors. M. Galler. *Series on Advances in Mathematics for Applied Sciences 70*. World Scientific, Hackensack, NJ, 2005. \$72.00 (228 pp.). ISBN 981-256-355-5

Realizing Controllable Quantum States: Mesoscopic Superconductivity and Spintronics—In the Light of Quantum Computation. H. Takayanagi, J. Nitta, eds. Proc. symp., Atsugi, Japan, Mar. 2004. World Scientific, Hackensack, NJ, 2005. \$88.00 (492 pp.). ISBN 981-256-468-3

Cosmology and Relativity

100 Years of Gravity and Accelerated Frames: The Deepest Insights of Einstein and Yang–Mills. J.-P. Hsu, D. Fine, eds. *Advanced Series on Theoretical Physical Science 9*. World Scientific, Hackensack, NJ, 2005. \$85.00 (623 pp.). ISBN 981-256-335-0

Inflationary Cosmology Revisited: An Overview of Contemporary Scientific Cosmology After the Inflationary Proposal. J. A. Gonzalo. World Scientific, Hackensack, NJ, 2005. \$42.00 (104 pp.). ISBN 981-256-151-X

It's About Time: Understanding Einstein's Relativity. N. D. Mermin. Princeton U. Press, Princeton, NJ, 2005. \$29.95 (192 pp.). ISBN 0-691-12201-6

Modeling Black Hole Evaporation. A. Fabbri, J. Navarro-Salas. Imperial College Press, London, 2005. \$55.00 (334 pp.). ISBN 1-86094-527-9

The New Cosmology. M. Colless, ed. *Canberra International Physics Summer Schools 16*. Proc. sch., Canberra, Australia, Feb. 2003. World Scientific, Hackensack, NJ, 2005. \$88.00 (238 pp.). ISBN 981-256-066-1

PASCOS 2004. Part 1: Particles, Strings and Cosmology. Part 2: Themes in Unification—The Pran Nath Festschrift. G. Alverson, E. Barberis, P. Nath, M. T. Vaughn, eds. Proc. symp., Boston, Aug. 2004. World Scientific, Hackensack, NJ, 2005. \$168.00 set (942 pp. set). ISBN 981-256-479-9

String Theory and Cosmology. U. Danielsson, A. Goobar, B. Nilsson, eds. Proc. symp., Sigtuna, Sweden, Aug. 2003. World Scientific, Hackensack, NJ, 2005. \$38.00 (105 pp.). ISBN 981-256-433-0

The Universe of General Relativity. A. J. Kox, J. Eisenstaedt, eds. *Einstein Studies 11*. Birkhäuser, Boston, 2005. \$99.00 (383 pp.). ISBN 0-8176-4380-X

Device Physics

Advanced Devices and Materials for Laser Remote Sensing. A. Aksnes, F. Amzajerdian, D. Killinger, L. Merhari, eds. *Materials Research Society 883*. Proc. symp., San Francisco, Mar. 2005. MRS, Warrendale, PA, 2005. \$97.00 (252 pp.). ISBN 1-55899-837-3

Guided Wave Optical Components and Devices: Basics, Technology, and Applications. B. P. Pal, ed. Elsevier Academic Press, Burlington, MA, 2006. \$79.95 (445 pp.). ISBN 0-12-088481-X

Energy and Environment

Climate Change Begins at Home: Life on the Two-Way Street of Global Warming. D. Reay. Macmillan, New York, 2005. \$24.95 (203 pp.). ISBN 1-4039-4578-0

Fluids

Large Eddy Simulation for Incompressible Flows: An Introduction. 3rd ed. P. Sagaut. *Scientific Computation*. Springer-Verlag, New York, 2006 [2002]. \$89.95 (556 pp.). ISBN 3-540-26344-6

Large-Eddy Simulations of Turbulence. M. Lesieur, O. Métais, P. Comte. Cambridge U. Press, New York, 2005. \$65.00 (219 pp.). ISBN 0-521-78124-8

Models for Polymeric and Anisotropic Liquids. M. Kröger. *Lecture Notes in Physics 675*. Springer-Verlag, New York, 2005. \$59.95 (229 pp.). ISBN 3-540-26210-5

Prediction of Turbulent Flows. G. F. Hewitt, J. C. Vassilicos, eds. Cambridge U. Press, New York, 2005. \$175.00 (343 pp.). ISBN 0-521-83899-1

Turbulent Shear Layers in Supersonic Flow. 2nd ed. A. J. Smits, J.-P. Dussauge. Springer-Verlag, New York, 2006 [1996]. \$119.00 (410 pp.). ISBN 0-387-26140-0

Worlds of Flow: A History of Hydrodynamics from the Bernoullis to Prandtl. O. Darrigol. Oxford U. Press, New York, 2005. \$74.50 (356 pp.). ISBN 0-19-856843-6

History and Philosophy

Ben Franklin: America's Original Entrepreneur. B. McCormick. Entrepreneur Press, Irvine, CA, 2005. \$26.95 (266 pp.). ISBN 1-932531-68-8

Classic Feynman: All the Adventures of a Curious Character. R. P. Feynman, R. Leighton, ed. W. W. Norton, New York, 2006. \$29.95 (511 pp.). ISBN 0-393-06132-9, CD-ROM

First Man: The Life of Neil A. Armstrong. J. R. Hansen. Simon & Schuster, New York, 2005. \$30.00 (769 pp.). ISBN 0-7432-5631-X

Galileo's Pendulum: From the Rhythm of Time to the Making of Matter. R. G. Newton. Harvard U. Press, Cambridge, MA, 2005 [2004, reissued]. \$13.95 paper (153 pp.). ISBN 0-674-01848-6

God Created the Integers: The Mathematical Breakthroughs That Changed History. S. Hawking, ed. Running Press, Philadelphia, 2005. \$29.95 (1160 pp.). ISBN 0-7624-1922-9

Huygens: The Man Behind the Principle. C. D. Andriess (translated from Dutch by S. Miedema). Cambridge U. Press, New York, 2005. \$90.00 (440 pp.). ISBN 0-521-85090-8

Los Alamos: 1944–1947. T. M. Gibson, J. Michnovicz. *Images of America*. Arcadia, Charleston, SC, 2005. \$19.99 paper (128 pp.). ISBN 0-7385-2973-7

Pierre Simon Laplace, 1749–1827: A Determined Scientist. R. Hahn. Harvard U. Press, Cambridge, MA, 2005. \$35.00 (310 pp.). ISBN 0-674-01892-3

Secrets of the Old One: Einstein, 1905. J. Bernstein. Copernicus Books/Springer-Verlag, New York, 2006. \$25.00 (200 pp.). ISBN 0-387-26005-6

Instrumentation and Techniques

Biomedical Image Analysis. R. M. Rangayyan. *The Biomedical Engineering Series*. CRC Press, Boca Raton, FL, 2005. \$89.95 (1272 pp.). ISBN 0-8493-9695-6

Ion Mobility Spectrometry. 2nd ed. G. A. Eiceman, Z. Karpas. CRC Press/Taylor & Francis, Boca Raton, FL, 2005 [1994]. \$159.95 (350 pp.). ISBN 0-8493-2247-2, CD-ROM

Iron Dominated Electromagnets: Design, Fabrication, Assembly and Measurements. J. T. Tanabe. World Scientific, Hackensack, NJ, 2005. \$48.00, \$28.00 paper (335 pp.). ISBN 981-256-327-X, ISBN 981-256-381-4 paper, CD-ROM

New from Oxford!

THE PENDULUM

A Case Study in Physics

Gregory L. Baker and James A. Blackburn

The Pendulum: A Case Study in Physics describes one physical system—the pendulum—and its manifestations in classical and modern physics. While being a technical work, this remarkable study is set within the context of the technological, historical and cultural developments to which the pendulum has contributed.

2005 304 pp.
0-19-856754-5 \$99.50



Forthcoming!

MODERN SUPERSYMMETRY

Dynamics and Duality

John Terning

The book provides a detailed survey of the modern developments in supersymmetry that are essential preparation for a graduate student or researcher intending to enter into particle theory or string theory.
(*The International Series of Monographs on Physics 152*)

March 2006 288 pp.
0-19-856763-4 \$109.50



WORLDS OF FLOW

A History of Hydrodynamics from the Bernoullis to Prandtl

Olivier Darrigol

"This is another brilliant work by a distinguished historian of physics, a very important and substantial contribution."

—Peter Harman, Professor of the History of Science, Lancaster University

2005 376 pp.
0-19-856843-6 \$74.50



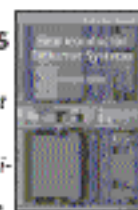
SEMICONDUCTOR DETECTOR SYSTEMS

Helmuth Spieler

"The beauty of this book is that it takes a system approach, which combines the understanding of the physics of semiconductor detectors with the necessary electronics. I believe this book will be the standard reference work on the subject."

—Tony Weldberg, University of Oxford
(*Series on Semiconductor Science and Technology 12*)

2005 512 pp.
0-19-852784-5 \$134.50



OXFORD
UNIVERSITY PRESS

Prices are subject to change and apply only in the U.S.

To order, please call 1-800-451-7556.

In Canada, call 1-800-387-8020.

Never miss an Oxford sale!

Visit our web site at www.oup.com/us.

Satisfaction Guaranteed or your money back.

Materials Science

Adsorption Phenomena and Anchoring Energy in Nematic Liquid Crystals. G. Barbero, L. R. Evangelista. *The Liquid Crystals Book Series*. CRC Press/Taylor & Francis, Boca Raton, FL, 2006. \$139.95 (352 pp.). ISBN 0-8493-3584-1

Alignment Technologies and Applications of Liquid Crystal Devices. K. Takato et al. *The Liquid Crystals Book Series*. Taylor & Francis, New York, 2005. \$129.95 (263 pp.). ISBN 0-748-40902-5

Current Topics in Physics: In Honor of Sir Roger J. Elliott. R. A. Barrio, K. K. Kaski, eds. Imperial College Press, London, 2005. \$88.00 (397 pp.). ISBN 1-86094-550-3

Dynamics of Surfactant Self-Assemblies: Micelles, Microemulsions, Vesicles, and Lyotropic Phases. R. Zana, ed. *Surfactant Science Series 125*. CRC Press/Taylor & Francis, Boca Raton, FL, 2005. \$159.95 (518 pp.). ISBN 0-8247-5822-6

Electronic and Optical Properties of Conjugated Polymers. W. Barford. *International Series of Monographs on Physics 129*. Oxford U. Press, New York, 2005. \$112.50 (262 pp.). ISBN 0-19-852680-6

Electronic Composites. M. Taya. Cambridge U. Press, New York, 2005. \$120.00 (360 pp.). ISBN 0-521-84174-7

Electronic Properties of Novel Nanostructures. H. Kuzmany, J. Fink, M. Mehring, S. Roth, eds. *AIP Conference Proceedings 786*. Proc. sch., Kirchberg/Tirol, Austria, Mar. 2005. AIP, Melville, NY, 2005. \$195.00 (635 pp.). ISBN 0-7354-0275-2

Fat Crystal Networks. A. G. Marangoni. *Food Science and Technology 140*. Marcel Dekker, New York, 2005. \$199.95 (854 pp.). ISBN 0-8247-4075-0, CD-ROM

Glassy Materials and Disordered Solids: An Introduction to Their Statistical Mechanics. K. Binder, W. Kob. World Scientific, Hackensack, NJ, 2005. \$78.00 (442 pp.). ISBN 981-256-510-8

Materials for Information Technology: Devices, Interconnects and Packaging. E. Zschech, C. Whelan, T. Mikolajick, eds. *Engineering Materials and Processes*. Springer-Verlag, London, 2005. \$149.00 (508 pp.). ISBN 1-85233-941-1

Materials Issues in Art and Archaeology VII. P. B. Vandiver, J. L. Mass, A. Murray, eds. *Materials Research Society Symposium Proceedings 852*. Proc. symp., Boston, Nov.-Dec. 2004. MRS, Warrendale, PA, 2005. \$86.00 (378 pp.). ISBN 1-55899-800-4

Materials, Technology and Reliability of Advanced Interconnects—2005. P. R. Besser et al., eds. *Materials Research Society Symposium Proceedings 863*. Proc. symp., San Francisco, Mar.-Apr. 2005.

MRS, Warrendale, PA, 2005. \$100.00 (411 pp.). ISBN 1-55899-816-0

Molecular Modeling Techniques in Material Sciences. J.-R. Hill, L. Subramanian, A. Maiti. CRC Press/Taylor & Francis, Boca Raton, FL, 2005. \$119.95 (313 pp.). ISBN 0-8247-2419-4

Nanoparticle Assemblies and Superstructures. N. A. Kotov, ed. CRC Press/Taylor & Francis, Boca Raton, FL, 2006. \$199.95 (626 pp.). ISBN 0-8247-2524-7

Nanostructured and Advanced Materials for Applications in Sensor, Optoelectronic and Photovoltaic Technology. A. Vaseashta, D. Dimova-Malinovska, J. M. Marshall, eds. *NATO Science Series 2: Mathematics, Physics and Chemistry 204*. Proc. inst., Sozopol, Bulgaria, Sept. 2004. Springer-Verlag, Dordrecht, the Netherlands, 2005. \$199.00 (425 pp.). ISBN 1-4020-3560-8

Nanotubes and Nanowires. C. N. R. Rao, A. Govindaraj. *RSC Nanoscience and Nanotechnology*. Royal Society of Chemistry, Cambridge, UK, 2005. \$149.00 (272 pp.). ISBN 0-85404-832-4

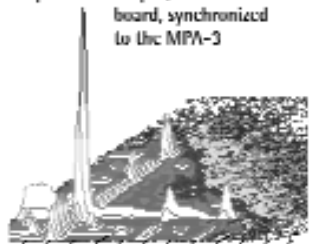
Polymer-Layered Silicate and Silica Nanocomposites. Y. C. Ke, P. Stroeve. Elsevier, San Diego, CA, 2005. \$160.00 (394 pp.). ISBN 0-444-51570-4

Silicon Heterostructure Handbook: Materials, Fabrication, Devices, Circuits, and Applications of SiGe and Si

Capture 6 Million events/sec with our next-generation Multiparameter System

The new MPA-3 turns your PC into the fastest PC-based Multiparameter Multichannel Analyzer System for acquiring and histogramming time-coincident events.

- Up to >6,000,000 ADC events/sec throughput
- Up to 16 digital inputs (16 bits each) for outputs from ADC's, TOF's, Multiscalers, IAC/ADC's etc.
- PCI-bus Interface for fastest data transfer
- HIST-MODE and RFPI AY software compatible with WINDOWS-NT
- Versatile HIST-Mode data storage in RAM, on hard disk or special Disk Array-System RAID
- Optional 12-input, 100 MHz scaler board, synchronized to the MPA-3



We provide complete solutions - call to discuss your application with us. (In the USA call Quantar Technology: 831-479-5277)

For further details and applications visit our web-page: <http://www.fastcomtec.com>

FAST ComTec GmbH For information contact:

FAST ComTec GmbH, Grünwalder Weg 88a

D-82041 Oberhaching/Germany

Web Page: <http://www.fastcomtec.com>, e-mail: support@fastcomtec.com

Phone: +49-89-665100-50, FAX: +49-89-665100-40, in the USA call (800) 429-5277

JANIS

CRYOGENICS FROM JANIS



- 10 mK to 800 K
- Cryocoolers
- LHe/LN₂ Cryostats
- Magnet Systems
- Dilution Refrigerator Systems
- Micromanipulated Probe Stations

Janis Research Company

2 Javel Drive Woburn, MA 01897 USA

TEL: +1 781 607-3790 FAX: +1 781 607-0640 sales@janis.com

Visit our website at www.janis.com

Strained-Layer Epitaxy. J. D. Cressler, ed. CRC Press/Taylor & Francis, Boca Raton, FL, 2006. \$149.95 (1227 pp.). ISBN 0-8493-3559-0

Structure and Mechanical Behavior of Biological Materials. P. Fratzl, W. J. Landis, R. Wang, F. H. Silver, eds. *Materials Research Society Symposium Proceedings 874*. Proc. symp., San Francisco, Mar. 2005. MRS, Warrendale, PA, 2005. \$92.00 (214 pp.). ISBN 1-55899-828-4

Supramolecular Polymers. 2nd ed. A. Ciferri, ed. CRC Press/Taylor & Francis, Boca Raton, FL, 2005 [2000]. \$139.95 (761 pp.). ISBN 0-8247-2331-7

Miscellaneous

2006 Graduate Programs in Physics, Astronomy, and Related Fields. AIP, Melville, NY, 2005. \$68.00 paper (826 pp.). ISBN 0-7354-0272-8

CRC Handbook of Chemistry and Physics. 86th ed. D. R. Lide, ed. CRC Press/Taylor & Francis, Boca Raton, FL, 2005 [2004]. \$139.95 (2544 pp.). ISBN 0-8493-0486-5

Nonlinear Science and Chaos

Complexity and Criticality. K. Christensen, N. R. Moloney. *Imperial College Press Advanced Physics Texts 1*. Imperial College Press, London, 2005. \$68.00,

\$34.00 paper (392 pp.). ISBN 1-86094-504-X, ISBN 1-86094-517-1 paper

Complexity in Chemistry, Biology, and Ecology. D. Bonchev, D. H. Rouvray, eds. *Mathematical and Computational Chemistry*. Springer-Verlag, New York, 2005. \$119.00 (344 pp.). ISBN 0-387-23264-8

Nuclear Physics

Nuclear Superfluidity: Pairing in Finite Systems. D. M. Brink, R. A. Broglia. *Cambridge Monographs on Particle Physics, Nuclear Physics and Cosmology 24*. Cambridge U. Press, New York, 2005. \$140.00 (378 pp.). ISBN 0-521-39540-2

The Quantum World of Nuclear Physics. Y. A. Berezhtnoy. *Series on Stability, Vibration and Control of Systems 17*. World Scientific, Hackensack, NJ, 2005. \$48.00 (191 pp.). ISBN 981-256-387-3

Optics and Photonics

Electromagnetic Theory and Applications for Photonic Crystals. K. Yasumoto, ed. *Optical Science and Engineering 102*. CRC Press/Taylor & Francis, Boca Raton, FL, 2006. \$119.95 (448 pp.). ISBN 0-8493-3677-5

Encyclopedic Handbook of Integrated Optics. K. Iga, Y. Kokubun, eds. CRC Press/Taylor & Francis, Boca Raton, FL, 2006. \$139.95 (507 pp.). ISBN 0-8247-2425-9

Foundations of Photonic Crystal Fibres. F. Zolla et al. Imperial College Press, London, 2005. \$58.00 (343 pp.). ISBN 1-86094-507-4

Laser Cladding. E. Toyserkani, A. Khajepour, S. Corbin. CRC Press, Boca Raton, FL, 2005. \$129.95 (260 pp.). ISBN 0-8493-2172-7

Laser Remote Sensing. T. Fujii, T. Fukuchi, eds. *Optical Engineering 97*. CRC Press/Taylor & Francis, Boca Raton, FL, 2005. \$139.95 (888 pp.). ISBN 0-8247-4256-7

Multi-Sensor Image Fusion and Its Applications. R. S. Blum, Z. Liu, eds. *Signal Processing and Communications 26*. CRC Press/Taylor & Francis, Boca Raton, FL, 2006. \$139.95 (505 pp.). ISBN 0-8493-3417-9

Semiconductor Lasers: Stability, Instability and Chaos. J. Ohtsubo. *Springer Series in Optical Sciences 111*. Springer-Verlag, New York, 2006. \$129.00 (356 pp.). ISBN 3-540-23675-9

Ultrafast Lasers for Materials Science. M. J. Kelley, E. W. Kreutz, M. Li, A. Piqué, eds. *Materials Research Society Symposium Proceedings 850*. Proc. symp., Boston, Nov.-Dec. 2004. MRS, Warrendale, PA, 2005. \$86.00 (227 pp.). ISBN 1-55899-798-9

Wearable Electronics and Photonics. X. Tao, ed. *Woodhead Publishing in Textiles*. Woodhead, Cambridge, UK, and

SPECTROSCOPIC ELLIPSOMETERS FOR MATERIALS CHARACTERIZATION

Quality Instruments,
Outstanding Support

Take spectroscopic
ellipsometry to a new level,
with the widest spectral range
available: VUV to Far-IR.

Accurately determine:

- ♦ Optical constants
Dielectrics, organics,
semiconductors,
metals...
- ♦ Thin film thickness
- ♦ Composition
- ♦ Sample mapping
...and more.



J.A. Woollam Co., Inc.

845 M St., Suite 102, Lincoln, NE
Ph 402-477-7501 Fax 402-477-8214
www.jawoollam.com



Plane and simple

Our precision tiltmeters measure the angular position and movement of:

- telescopes
- antennae
- beamlines
- foundations
- any machine or structure

GRAVITY REFERENCED
UP TO $\pm 80^\circ$
OPERATING RANGE



Available outputs include analog voltage, 4-20 mA, RS232 and RS485.

500 Series – nanoradian resolution
700 Series – microradian resolution
900 Series – 0.01 degree resolution

Model 520 Universal Tiltmeter

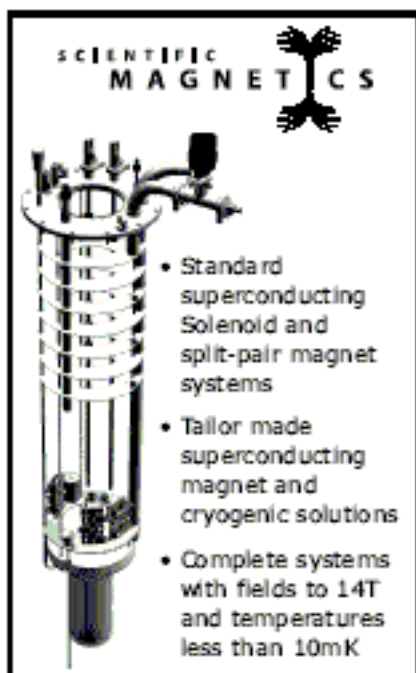
APPLIED GEOMECHANICS

Did it move, or didn't it?

Tel: 831.462.2001 USA
Fax: 831.462.1418
applied@geomechanics.com

www.geomechanics.com

See www.pt.ims.ca/7374-35



SCIENTIFIC MAGNETICS

- Standard superconducting Solenoid and split-pair magnet systems
- Tailor made superconducting magnet and cryogenic solutions
- Complete systems with fields to 14T and temperatures less than 10mK

Full Details are at:
www.scientificmagnetics.com
E-Mail:
info@scientificmagnetics.co.uk
Phone: 978-256-2558
APS Booth #220

See www.pt.ims.ca/7374-36

CRC Press, Boca Raton, FL, 2005. \$225.00 (250 pp.). ISBN 0-8493-2595-1

Particle Physics

Calorimetry in Particle Physics. C. Cecchi, P. Cenci, P. Lubrano, M. Pepe, eds. Proc. conf., Perugia, Italy, Mar.–Apr. 2004. World Scientific, Hackensack, NJ, 2005. \$138.00 (541 pp.). ISBN 981-256-272-9

From Quarks to Black Holes: Progress in Understanding the Logic of Nature. A. Zichichi, ed. *The Subnuclear Series 41*. Proc. sch., Erice, Italy, Aug.–Sept. 2003. World Scientific, Hackensack, NJ, 2005. \$128.00 (590 pp.). ISBN 981-256-375-X

ICHEP 2004. Vols. 1 and 2. H. Chen, D. Du, W. Li, C. Lu, eds. Proc. conf., Beijing, China, Aug. 2004. World Scientific, Hackensack, NJ, 2005. \$88.00 set (1370 pp. set). ISBN 981-256-110-2

IFAE 2005. A. Tricomi, S. Albergo, M. Chiorboli, eds. *AIP Conference Proceedings 794*. Proc. mtg., Catania, Italy, Mar.–Apr. 2005. AIP, Melville, NY, 2005. \$153.00 paper (324 pp.). ISBN 0-7354-0285-X

Neutrino Oscillations and Their Origin. Y. Suzuki, M. Nakahata, S. Moriyama, Y. Koshio, eds. Proc. wksp., Tokyo, Japan, Feb. 2004. World Scientific, Hackensack, NJ, 2005. \$130.00 (503 pp.). ISBN 981-256-362-8

Pentaquark 04. A. Hosaka, T. Hotta, eds. Proc. wksp., Nishiharima, Japan, July 2004. World Scientific, Hackensack, NJ, 2005. \$122.00 (445 pp.). ISBN 981-256-338-5

Selected Papers (1945–1980) with Commentary. C. N. Yang. *World Scientific Series in 20th Century Physics 36*. World Scientific, Hackensack, NJ, 2005. \$48.00 (603 pp.). ISBN 981-256-367-9

Soft Multihadron Dynamics. W. Kittel, E. A. De Wolf. World Scientific, Hackensack, NJ, 2005. \$98.00 (652 pp.). ISBN 981-256-295-8

Plasmas and Fusion

Edward Teller Lectures: Lasers and Inertial Fusion Energy. H. Hora, G. H. Miley, eds. Imperial College Press, London, 2005. \$63.00 (365 pp.). ISBN 1-86094-468-X

Fusion Plasma Physics. W. M. Stacey. Wiley-VCH, Weinheim, Germany, 2005. C79.00 paper (557 pp.). ISBN 3-527-40586-0

Physics and Applications of Complex Plasmas. S. V. Vladimirov, K. Ostrikov, A. A. Samarian. Imperial College Press, London, 2005. \$88.00 (439 pp.). ISBN 1-86094-572-4

Radio Frequency Power in Plasmas. S. J. Wukitch, P. T. Bonoli, eds. *AIP Conference Proceedings 787*. Proc. conf., Park City, UT, Apr. 2005. AIP, Melville, NY, 2005. \$159.00 (457 pp.). ISBN 0-7354-0276-0

Popularizations

The Amateur Astronomer. 12th ed. P. Moore. Springer-Verlag, New York, 2006 [1990]. \$39.95 (293 pp.). ISBN 1-85233-878-4

The Best American Science and Nature Writing 2005. J. Weiner, ed. *The Best American Series*. Houghton Mifflin, New York, 2005. \$27.50, \$14.00 paper (304 pp.). ISBN 0-618-27341-7, ISBN 0-618-27343-3 paper

Chronos: How Time Shapes Our Universe. É. Klein (translated from French by Glenn Burney). Thunder's Mouth Press, New York, 2005. \$24.00 (191 pp.). ISBN 1-56025-708-3

Death Rays, Jet Packs, Stunts and Supercars: The Fantastic Physics of Film's Most Celebrated Secret Agent. B. Parker. Johns Hopkins U. Press, Baltimore, MD, 2005. \$25.00 (231 pp.). ISBN 0-8018-8248-6

Deep Sky Objects: The Best and Brightest from Four Decades of Comet Chasing. D. H. Levy. Prometheus Books, Amherst, NY, 2005. \$20.00 paper (362 pp.). ISBN 1-59102-361-0

The Discoveries: Great Breakthroughs in 20th Century Science. A. Lightman. Pantheon Books, New York, 2005. \$32.50 (553 pp.). ISBN 0-375-42168-8

Elementary Particles: Building Blocks of Matter. H. Fritzsch (translated from German by K. Heusch). World Scientific, Hackensack, NJ, 2005. \$34.00, \$16.00 paper (111 pp.). ISBN 981-256-141-2, ISBN 981-256-408-X paper

The Equations: Icons of Knowledge. S. Bais. Harvard U. Press, Cambridge, MA, 2005. \$18.95 (96 pp.). ISBN 0-674-01967-9

Laser Beam Shaping Applications. F. M. Dickey, S. C. Holswade, D. L. Shealy, eds. *Optical Science and Engineering 102*. CRC Press/Taylor & Francis, Boca Raton, FL, 2006. \$139.95 (357 pp.). ISBN 0-8247-5941-9

Life as We Do Not Know It: The NASA Search for (and Synthesis of) Alien Life. P. D. Ward. Viking, New York, 2005. \$25.95 (292 pp.). ISBN 0-670-03458-4

Origins: Fourteen Billion Years of Cosmic Evolution. N. D. Tyson, D. Goldsmith, W. W. Norton, New York, 2005 [2004, reissued]. \$17.95 paper (345 pp.). ISBN 0-393-32758-2

The Physics of Superheroes. J. Kakalios. Gotham Books, New York, 2005. \$26.00 (365 pp.). ISBN 1-592-40146-5

The Plausibility of Life: Resolving Darwin's Dilemma. M. W. Kirschner, J. C. Gerhart. Yale U. Press, New Haven, CT, 2005. \$30.00 (314 pp.). ISBN 0-300-10865-6

The Quantum World: Quantum Physics for Everyone. K. W. Ford. Harvard U. Press, Cambridge, MA, 2005 [2004, reissued]. \$16.95 paper (294 pp.). ISBN 0-674-01832-X

The Space Tourist's Handbook: Where to Go, What to See, and How to Prepare for the Ride of Your Life. E. Anderson. Quirk Books, Philadelphia, 2005. \$15.95 paper (191 pp.). ISBN 1-59474-066-6

Spook: Science Tackles the Afterlife. M. Roach. W. W. Norton, New York, 2005. \$24.95 (311 pp.). ISBN 0-393-05962-6 ■