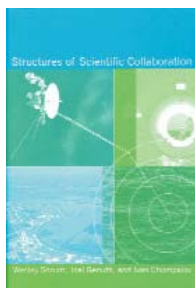


to any really strong conclusions. For example, researchers have found that highly bureaucratic collaborations have a rather even mix of principal-investigator-controlled data analysis and publication, versus open data analysis and publication, while "democratic" projects have much more of the latter.

One interesting conclusion, which would perhaps be thought obvious, is that the amount of conflict in a collaboration decreases as the level of perceived trust among the collaborators increases. The authors do attempt to measure the success of collaborations by asking the participants in the study to estimate their success both subjectively, that is, by their own estimation, and objectively by reference to their peers. The subjective measure identifies the most successful projects as those for which funding was uncertain at the beginning and data were not shared outside the collaboration. The objective measure identifies successful projects as those that had numerous organizations involved, international teamwork, and a strong hierarchical structure. These conclusions probably say more



about human nature than about the actual success of the collaborations.

At the beginning of the study, Shrum, Genuth, and Chompalov identify two areas of significant interest to any scientist thinking about large-scale collaboration, and, disappointingly, they do not clearly evaluate them. The first is the interaction between the bureaucracy necessary for a large collaboration and the central role of new technology; this interaction is the defining characteristic of large scientific collaborations. Bureaucracy appears everywhere in modern life and is only rarely confronted with technology as the driving force of an endeavor. In scientific collaboration the two are intertwined, and the authors identify that relationship as unique; however, they reach no conclusions about it. The second factor is reward. A scientist who gives up his or her autonomy, and possibly many years of scientific productivity, must be rewarded with data, observation time, or other access to the products of the collaboration. Again, that issue is identified but not given any extensive coverage, nor are any conclusions drawn from it.

Despite some caviling, I believe that *Structures of Scientific Collaboration* has significant value. It tackles in a rigorous way an important and difficult subject and, eschewing the anecdotal, succeeds in at least identifying and labeling the different types of collaboration and exploring in detail their nature and outcomes. The conclusions, though weak, are entirely consistent with the data; they simply reflect the complexity of scientific collaboration. I believe the book is illuminating, and it may well form the basis for future studies. It will be useful as a reference and handbook to the people who make and execute science policy.

Martin J. L. Turner
University of Leicester
Leicester, United Kingdom

**new
books**

**history
and
philosophy**

Yoshio Nishina: Father of Modern Physics in Japan. D.-W. Kim. Taylor & Francis, New York, 2007. \$69.95 (195 pp.). ISBN 978-0-7503-0755-0



Hinds Instruments

Polarization Analysis Specialists

Why Use PEM Technology?

- High Sensitivity
- No Moving Parts
- UV-IR Spectral Range
- Stable, Pure Resonance Modulation



Systems and Solutions

- Exicor® – Birefringence Measurement Instrumentation for Optics, Film, Plastic, LCDs
- Abrio™ – Imaging for Metrology
- High Speed Optical Choppers – 50 kHz, 100 kHz, custom frequencies
- Photoelastic Modulators – for MOKE, Rheology, Ellipsometry, and Faraday Rotation
- Stokes Polarimeters – Fiber, Lasers and Astronomical



www.hindsinstruments.com learn@hindsinstruments.com

See www.pt.ims.ca/16300-24

JANIS

HE-3 CRYOSTATS



- Sample in Vacuum/Liquid
- Optical Access
- Top Loading
- Storage Dewar Inserts
- UHV Sample Tube

Janis Research Company

2 Jewel Drive Wilmington, MA 01887 USA
TEL +1 978 657-8750 FAX +1 978 658-0349 sales@janis.com
Visit our website at www.janis.com.

See www.pt.ims.ca/16300-25

instrumentation and techniques

Diffraction-Limited Imaging with Large and Moderate Telescopes. S. K. Saha. World Scientific, Hackensack, NJ, 2007. \$78.00 (604 pp.). ISBN 978-981-270-777-2

Fundamental and Applied Spectroscopy. M. Telmini, N. T. Mliki, E. Sediki, eds. *AIP Conference Proceedings* 935. Proc. conf., Sousse, Tunisia, Mar. 2007. AIP, Melville, NY, 2007. \$120.00 (260 pp.). ISBN 978-0-7354-0446-5

Introduction to Scanning Tunneling Microscopy. 2nd ed. C. J. Chen. *Monographs on the Physics and Chemistry of Materials* 64. Oxford U. Press, New York, 2008 [1993]. \$130.00 (423 pp.). ISBN 978-0-19-921150-0

Science Perspectives for 3D Spectroscopy. M. Kissler-Patig, J. R. Walsh, M. M. Roth, eds. *ESO Astrophysics Symposia*. Proc. wksp., Garching, Germany, Oct. 2005. Springer, New York, 2007. \$119.00 (400 pp.). ISBN 978-3-540-73490-1

materials science

Electrodynamics of Metamaterials. A. K. Sarychev, V. M. Shalaev. World Scientific, Hackensack, NJ, 2007. \$50.00 (247 pp.). ISBN 978-981-02-4245-9

Lateral Alignment of Epitaxial Quantum Dots. O. G. Schmidt, ed. *Nanoscience and Technology*. Springer, New York, 2007. \$239.00 (707 pp.). ISBN 978-3-540-46935-3

The Materials Physics Companion. A. C. Fischer-Cripps. Taylor & Francis, New York, 2008. \$24.95 *paper* (200 pp.). ISBN 978-1-58488-680-8

Microporous Framework Solids. P. A. Wright. *RSC Materials Monographs*. Royal Society of Chemistry, Cambridge, UK, 2008. \$159.00 (429 pp.). ISBN 978-0-85404-812-0

Microstructural Randomness and Scaling in Mechanics of Materials. M. Ostoja-Starzewski. *CRC Series: Modern Mechanics and Mathematics* 6. Chapman & Hall/CRC/Taylor & Francis, Boca Raton, FL, 2008. \$99.95 (471 pp.). ISBN 978-1-58488-417-0

Multifunctional Barriers for Flexible Structure: Textile, Leather and Paper. S. Duquesne, C. Magniez, G. Camino, eds. *Springer Series in Materials Science* 97. Springer, New York, 2007. \$159.00 (290 pp.). ISBN 978-3-540-71917-5

Physics of Negative Refraction and Negative Index Materials: Optical and Electronic Aspects and Diversified Approaches. C. M. Krowne, Y. Zhang, eds. *Springer Series in Materials Science* 98. Springer, New York, 2007. \$169.00 (378 pp.). ISBN 978-3-540-72131-4

Processing and Properties of Nanocomposites. S. G. Advani. World Scientific, Hackensack, NJ, 2007. \$93.00 (450 pp.). ISBN 978-981-270-390-3

Self-Organized Morphology in Nanostructured Materials. K. Al-Shamery, J. Parisi, eds. *Springer Series in Materials Science* 99. Springer, New York, 2008. \$149.95 (173 pp.). ISBN 978-3-540-72674-6

Strengthening Mechanisms in Crystal Plasticity. A. S. Argon. *Oxford Series on Materials Modelling* 4. Oxford U. Press, New York, 2008. \$85.00 (404 pp.). ISBN 978-0-19-851600-2

Stress-Induced Phenomena in Metallization. S. Ogawa, P. S. Ho, E. Zschech, eds. *AIP Conference Proceedings* 945. Proc. wksp., Kyoto, Japan, Apr. 2007. AIP, Melville, NY, 2007. \$99.00 (204 pp.). ISBN 978-0-7354-0459-5

Terahertz Frequency Detection and Identification of Materials and Objects. R. E. Miles, X.-C. Zhang, H. Eisele, A. Krotkus, eds. *NATO Science for Peace and Security Series B: Physics and Biophysics*. Springer, Dordrecht, the Netherlands, 2007. \$199.95, \$9.95 *paper* (364 pp.). ISBN 978-1-4020-6501-9, ISBN 978-1-4020-6502-6 *paper*

miscellaneous

2008 Graduate Programs in Physics, Astronomy, and Related Fields. American Institute of Physics, ed. AIP, Melville, NY, 2008. \$72.00 *paper* (838 pp.). ISBN 978-0-7354-0450-2

Concepts of Modern Physics: The Haifa Lectures. M. Sachs. Imperial College Press, London, 2007. \$48.00, \$26.00 *paper* (129 pp.). ISBN 978-1-86094-821-3, ISBN 978-1-86094-822-0 *paper*

nonlinear science and chaos

Advances in Neural Information Processing Systems 19. B. Schölkopf, J. C. Platt, T. Hofmann, eds. *Bradford Books*. Proc. conf., Vancouver, BC, Canada, Dec. 2006. MIT Press, Cambridge, MA, 2007. \$100.00 (1643 pp.). ISBN 978-0-262-19568-3

Brownian Agents and Active Particles: Collective Dynamics in the Natural and Social Sciences. 2nd ed. F. Schweitzer. *Springer Series in Synergetics*. Springer, New York, 2007 [2003]. \$59.95 *paper* (420 pp.). ISBN 978-3-540-73844-2

Complex Dynamics: Advanced System Dynamics in Complex Variables. V. G. Ivancevic, T. T. Ivancevic. *International Series on Intelligent Systems, Control and Automation: Science and Engineering* 34. Springer, Dordrecht, the Netherlands, 2007. \$199.00 (807 pp.). ISBN 978-1-4020-6411-1

Connections: An Introduction to the Economics of Networks. S. Goyal. Princeton U. Press, Princeton, NJ, 2007. \$60.00 (289 pp.). ISBN 978-0-691-12650-0

Driving Forces in Physical, Biological and Socio-Economic Phenomena: A Network Science Investigation of Social Bonds and Interactions. B. M. Roehner.

Cambridge U. Press, New York, 2007. \$75.00 (254 pp.). ISBN 978-0-521-85910-3

Econophysics of Markets and Business Networks. A. Chatterjee, B. K. Chakrabarti, eds. *New Economic Windows*. Proc. wksp., Kolkata, India, Mar. 2007. Springer, New York, 2007. \$89.95 (266 pp.). ISBN 978-88-470-0664-5

Large Scale Structure and Dynamics of Complex Networks: From Information Technology to Finance and Natural Science. G. Caldarelli, A. Vespignani, eds. *Complex Systems and Interdisciplinary Science* 2. World Scientific, Hackensack, NJ, 2007. \$82.00 (251 pp.). ISBN 978-981-270-664-5

The Nonlinear Universe: Chaos, Emergence, Life. A. C. Scott. *The Frontiers Collection*. Springer, New York, 2007. \$69.95 (364 pp.). ISBN 978-3-540-34152-9

Synchronization in Oscillatory Networks. G. V. Osipov, J. Kurths, C. Zhou. *Springer Series in Synergetics*. Springer, New York, 2007. \$109.00 (368 pp.). ISBN 978-3-540-71268-8

nuclear physics

Workshop on Calculation of Double-Beta-Decay Matrix Elements (MEDEX '07). O. Civitarese, I. Štekl, J. Suhonen, eds. *AIP Conference Proceedings* 942. Proc. conf., Prague, Czech Republic, June 2007. AIP, Melville, NY, 2007. \$69.00 (106 pp.). ISBN 978-0-7354-0456-4

optics and photonics

6th International Workshop on Information Optics (WIO '07). J. A. Benediktsson, B. Javidi, K. S. Gudmundsson, eds. *AIP Conference Proceedings* 949. Proc. wksp., Reykjavik, Iceland, June 2007. AIP, Melville, NY, 2007. \$145.00 *paper* (311 pp.). ISBN 978-0-7354-0463-2

Applied Charged Particle Optics. H. Liebl. Springer, New York, 2008. \$99.00 (130 pp.). ISBN 978-3-540-71924-3

Electromagnetic Wave Propagation in Turbulence: Evaluation and Application of Mellin Transforms. 2nd ed. R. J. Sasiela. SPIE Press, Bellingham, WA, 2007 [1994]. \$84.00 (366 pp.). ISBN 978-0-8194-6728-7

Fiber Based Dispersion Compensation. S. Ramachandran. *Optical and Fiber Communications Reports* 5. Springer, New York, 2007. \$239.00 (555 pp.). ISBN 978-0-387-40347-2

Field Guide to Illumination. A. V. Arecchi, T. Messadi, R. J. Koshe. *SPIE Field Guides* FG11. SPIE Press, Bellingham, WA, 2007. \$37.00 *paper* (137 pp.). ISBN 978-0-8194-6768-3

Frontiers in Surface Nanophotonics: Principles and Applications. D. L. Andrews, Z. Gaburro, eds. *Springer Series in Optical Sciences* 133. Springer, New York, 2007. \$129.00 (171 pp.). ISBN 978-0-387-48950-6

Lasers, Clocks and Drag-Free Control: Exploration of Relativistic Gravity in Space. H. Dittus, C. Lämmerzahl, S. G. Turyshev, eds. *Astrophysics and Space Science Library* 349. Springer, New York, 2008. \$179.00 (639 pp.). ISBN 978-3-540-34376-9

Matrix Methods for Optical Layout. G. Kloos. *Tutorial Texts Series* 77. SPIE Press, Bellingham, WA, 2007. \$47.00 *paper* (121 pp.). ISBN 978-0-8194-6780-5

Mesoscopic Physics of Electrons and Photons. E. Akkermans, G. Montambaux. Cambridge U. Press, New York, 2007. \$99.00 (588 pp.). ISBN 978-0-521-85512-9

Optical Correlation: Techniques and Applications. O. V. Angelsky, ed. SPIE Press, Bellingham, WA, 2007. \$76.00 *paper* (270 pp.). ISBN 978-0-8194-6534-4

Photon Transfer: $DN \rightarrow \lambda$. J. R. Janesick. SPIE Press, Bellingham, WA, 2007. \$56.00 *paper* (258 pp.). ISBN 978-0-8194-6722-5

The Power of Optical/IR Interferometry: Recent Scientific Results and 2nd Generation Instrumentation. A. Richichi, F. Delplanck, F. Paresce, A. Chelli, eds. *ESO Astrophysics Symposia*. Proc. wksp., Garching, Germany, Apr. 2005. Springer, New York, 2008. \$129.95 (602 pp.). ISBN 978-3-540-74253-1

Statistical Methods in Quantum Optics 2: Non-Classical Fields. H. J. Carmichael. *Theoretical and Mathematical Physics*. Springer, New York, 2008. \$109.00 (540 pp.). ISBN 978-3-540-71319-7

Wide Bandgap Light Emitting Materials and Devices. G. F. Neumark, I. L. Kuskovsky, H. Jiang, eds. Wiley-VCH, Weinheim, Germany, 2007. \$160.00 (214 pp.). ISBN 978-3-527-40331-8

particle physics

C2CR07: Colliders to Cosmic Rays. S. M. Tripathi, R. E. Breedon, eds. *AIP Conference Proceedings* 928. Proc. conf., Lake Tahoe, CA, Feb.–Mar. 2007. AIP, Melville, NY, 2007. \$102.00 (236 pp.). ISBN 978-0-7354-0438-0

Decoherence and the Quantum-to-Classical Transition. M. Schlosshauer. *The Frontiers Collection*. Springer, New York, 2007. \$99.00 (416 pp.). ISBN 978-3-540-35773-5

From Parity Violation to Hadronic Structure and More. K. de Jager et al., eds. Proc. wksp., Milos Island, Greece, May 2006. SIF, Bologna, Italy, and Springer, New York, 2007. \$199.00 (277 pp.). ISBN 978-3-540-74412-2

Meson Physics at COSY-11 and WASA-at-COSY. A. Kupś, P. Moskal, M. Wolke, eds. *AIP Conference Proceedings* 950. Proc. symp., Kraków, Poland, June 2007. AIP, Melville, NY, 2007. \$130.00 (280 pp.). ISBN 978-0-7354-0464-9

Quantum Decoherence: Poincaré Seminar 2005. B. Duplantier, J.-M. Raimond, V. Rivasseau, eds. *Progress in Mathematical*

Physics 48. Proc. lecture, Paris, Nov. 2005. Birkhäuser, Boston, 2007. \$89.95 (192 pp.). ISBN 978-3-7643-7807-3

Quantum Field Theory of Many-Body Systems: From the Origin of Sound to an Origin of Light and Electrons. X.-G. Wen. *Oxford Graduate Texts*. Oxford U. Press, New York, 2007 [2004, reissued]. \$42.50 *paper* (505 pp.). ISBN 978-0-19-922725-9

Quantum Mechanics. 5th ed. A. I. M. Rae. Taylor & Francis, New York, 2008 [2002]. \$59.95 *paper* (328 pp.). ISBN 978-1-58488-970-0

Quantum Spaces: Poincaré Seminar 2007. B. Duplantier, V. Rivasseau, eds. *Progress in Mathematical Physics* 53. Proc. lecture, Paris, Apr. 2007. Birkhäuser, Boston, 2007. \$109.00 (227 pp.). ISBN 978-3-7643-8521-7

Theoretical High Energy Physics. A. Misra, ed. *AIP Conference Proceedings* 939. Proc. wksp., Roorkee, India, Mar. 2007. AIP, Melville, NY, 2007. \$149.00 *paper* (370 pp.). ISBN 978-0-7354-0451-9

plasmas and fusion

Quantum Plasmadynamics: Unmagnetized Plasmas. D. B. Melrose. *Lecture Notes in Physics* 735. Springer, New York, 2008. \$89.95 (464 pp.). ISBN 978-0-387-73902-1

Radio Frequency Power in Plasmas. P. M. Ryan, D. A. Rasmussen, eds. *AIP Conference Proceedings* 933. Proc. conf., Clearwater, FL, May 2007. AIP, Melville, NY, 2007. \$152.00 (527 pp.). ISBN 978-0-7354-0444-1

popularizations

The Age of Everything: How Science Explores the Past. M. Hedman. U. Chicago Press, Chicago, 2007. \$25.00 (249 pp.). ISBN 978-0-226-32292-6

The Best of All Possible Worlds: Mathematics and Destiny. I. Ekeland (translated from French by I. Ekeland). U. Chicago Press, Chicago, 2007 [2006, reissued]. \$14.00 *paper* (207 pp.). ISBN 978-0-226-19995-5

Cosmological Enigmas: Pulsars, Quasars and Other Deep-Space Questions. M. Kidger. Johns Hopkins U. Press, Baltimore, MD, 2007. \$30.00 (224 pp.). ISBN 978-0-8018-8460-3

Evolution: What the Fossils Say and Why It Matters. D. R. Prothero. Columbia U. Press, New York, 2007. \$29.50 (381 pp.). ISBN 978-0-231-13962-5

The Joy of Physics. A. W. Wiggins. Prometheus Books, Amherst, NY, 2007. \$26.95 (390 pp.). ISBN 978-1-59102-590-0

Junk Science: An Overdue Indictment of Government, Industry, and Faith Groups That Twist Science for Their Own Gain. D. Agin. Thomas Dunne Books, New York, 2007 [2006, reissued]. \$14.95 *paper* (323 pp.). ISBN 978-0-312-37480-8

The Living Cosmos: Our Search for Life in the Universe. C. Impey. Random

House, New York, 2007. \$27.95 (393 pp.). ISBN 978-1-4000-6506-6

Supercontinent: Ten Billion Years in the Life of Our Planet. T. Nield. Harvard U. Press, Cambridge, MA, 2007. \$29.95 (288 pp.). ISBN 978-0-674-02659-9

Terra: Our 100-Million-Year-Old Ecosystem—and the Threats That Now Put It at Risk. M. Novacek. Farrar, Straus and Giroux, New York, 2007. \$27.00 (451 pp.). ISBN 978-0-374-27325-5

society and government

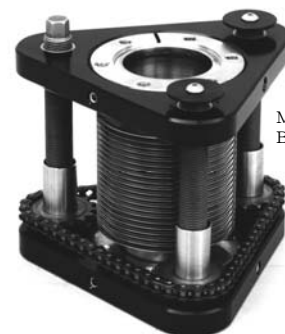
Deception: Pakistan, the United States, and the Secret Trade in Nuclear Weapons. A. Levy, C. Scott-Clark. Walker, New York, 2007. \$28.95 (543 pp.). ISBN 978-0-8027-1554-8

Nanotechnology Challenges: Implications for Philosophy, Ethics and Society. J. Schummer, D. Baird, eds. World Scientific, Hackensack, NJ, 2006. \$106.00 (468 pp.). ISBN 978-981-256-729-1

On Nuclear Terrorism. M. Levi. Harvard U. Press, Cambridge, MA, 2007. \$24.95 (210 pp.). ISBN 978-0-674-02649-0

The Star Wars Enigma: Behind the Scenes of the Cold War Race for Missile Defense. N. Hey. Potomac Books, Washington, DC, 2007 [2006, reissued]. \$18.95 *paper* (275 pp.). ISBN 978-1-59797-005-1

Bellows-Sealed Linear Translator (BLT)



Model
BLT026-3

*‘For life’s little
ups and downs’*

McAllister Technical Services

*Manufacturers of surface analytical
instruments and devices*

Ph. + 208-772-9527
800-445-3688

www.mcallister.com

space and planetary science

Catastrophic Events Caused by Cosmic Objects. V. Adushkin, I. Nemchinov, eds. Springer, Dordrecht, the Netherlands, 2008. \$139.00 (357 pp.). ISBN 978-1-4020-6451-7

The High Energy Solar Corona: Waves, Eruptions, Particles. K.-L. Klein, A. L. MacKinnon, eds. *Lecture Notes in Physics* 725. Springer, New York, 2007. \$99.95 (284 pp.). ISBN 978-3-540-71569-6

Robotic Exploration of the Solar System: Part 1, The Golden Age 1957–1982. P. Ulivi, D. M. Harland. *Springer-Praxis Books in Space Exploration*. Praxis/Springer, New York, 2007. \$39.95 paper (534 pp.). ISBN 978-0-387-49326-8

statistical physics and thermodynamics

Phase Transitions of Simple Systems. B. M. Smirnov, R. S. Berry. *Springer Series on Atomic, Optical, and Plasma Physics* 42. Springer, New York, 2008. \$159.00 (245 pp.). ISBN 978-3-540-71513-9

Radiation Thermometry: Fundamentals and Applications in the Petrochemical Industry. P. Saunders. *Tutorial Texts in Optical Engineering* TT78. SPIE Press, Bellingham, WA, 2007. \$47.00 paper (160 pp.). ISBN 978-0-8194-6783-6

Statistical Mechanics of Disordered Systems: A Mathematical Perspective. A. Bovier. *Cambridge Series in Statistical and Probabilistic Mathematics* 18. Cambridge U. Press, New York, 2006. \$85.00 (312 pp.). ISBN 978-0-521-84991-3

Theory of Periodic Conjugate Heat Transfer. Y. B. Zudin. Springer, New York, 2007. \$129.00 (162 pp.). ISBN 978-3-540-70723-3

Thermal Decomposition of Solids and Melts: New Thermochemical Approach to the Mechanism, Kinetics and Methodology. B. V. L'vov. *Hot Topics in Thermal Analysis and Calorimetry* 7. Springer, New York, 2007. \$219.00 (246 pp.). ISBN 978-1-4020-5671-0

texts and education

Complex Analysis with Applications in Science and Engineering. 2nd ed. H. Cohen. Springer, New York, 2007 [2003]. \$79.95 (477 pp.). ISBN 978-0-387-73057-8

Dynamical Systems with Applications Using Mathematica. S. Lynch. Birkhäuser, Boston, 2007. \$59.95 paper (484 pp.). ISBN 978-0-8176-4482-6

Exploring the World Ocean. W. S. Chamberlin, T. D. Dickey. McGraw-Hill, New York, 2008. \$106.88 paper (394 pp.). ISBN 978-0-07-301654-2

The Formation of the Solar System: Theories Old and New. M. Woolfson. Imper-

ial College Press, London, 2007. \$78.00 (318 pp.). ISBN 978-1-86094-824-4

Gravity, Black Holes, and the Very Early Universe: An Introduction to General Relativity and Cosmology. T. L. Chow. Springer, New York, 2008. \$89.95 (280 pp.). ISBN 978-0-387-73629-7

Introduction to Quantum Effects in Gravity. V. Mukhanov, S. Winitzki. Cambridge U. Press, New York, 2007. \$85.00 (273 pp.). ISBN 978-0-521-86834-1

Mathematics and Culture in Europe: Mathematics in Art, Technology, Cinema and Theatre. M. Manaresi, ed. (translated from Italian). Springer, New York, 2007 [2005]. \$69.95 paper (405 pp.). ISBN 978-3-540-71963-2, DVD-ROM

Nonlinear Ordinary Differential Equations: Problems and Solutions—A Sourcebook for Scientists and Engineers. D. W. Jordan, P. Smith. Oxford U. Press, New York, 2007. \$50.00 paper (587 pp.). ISBN 978-0-19-921203-3

Physics Workbook for Dummies. S. Holzner. Wiley, Hoboken, NJ, 2007. \$19.99 paper (322 pp.). ISBN 978-0-470-16909-4

Theoretical Microfluidics. H. Bruus. *Oxford Master Series in Physics: Condensed Matter Physics* 18. Oxford U. Press, New York, 2008. \$99.95, \$49.95 paper (346 pp.). ISBN 978-0-19-923508-7, ISBN 978-0-19-923509-4 paper

Thermodynamics in Materials Science. 2nd ed. R. DeHoff. *Materials Science*. CRC Press/Taylor & Francis, Boca Raton, FL, 2006 [1993]. \$99.95 (605 pp.). ISBN 978-0-8493-4065-9

theory and mathematical methods

Applications of Mathematics in Engineering and Economics '33. M. D. Todorov, ed. *AIP Conference Proceedings* 946. Proc. conf., Sozopol, Bulgaria, June 2007. AIP, Melville, NY, 2007. \$139.00 (280 pp.). ISBN 978-0-7354-0460-1

Dirac Operators in Representation Theory. J.-S. Huang, P. Pandžić. *Mathematics: Theory and Applications*. Birkhäuser, Boston, 2006. \$59.95 (199 pp.). ISBN 978-0-8176-3218-2

Functional Fractional Calculus for System Identification and Controls. S. Das. Springer, New York, 2008. \$139.00 (239 pp.). ISBN 978-3-540-72702-6

The Geometry and Topology of Coxeter Groups. M. W. Davis. *London Mathematical Society Monographs Series* 32. Princeton U. Press, Princeton, NJ, 2008. \$85.00 (584 pp.). ISBN 978-0-691-13138-2

Handbook of Mathematics. 5th ed. I. N. Bronshtein, K. A. Semendyayev, G. Musiol, H. Muehlig. Springer, New York, 2007 [2003]. \$79.95 (1159 pp.). ISBN 978-3-540-72121-5

An Introduction to Riemann Surfaces, Algebraic Curves and Moduli Spaces. 2nd ed. M. Schlichenmaier. *Theoretical and Mathematical Physics*. Springer, New York, 2007 [1990]. \$79.95 (217 pp.). ISBN 978-3-540-71174-2

Knot Theory and Its Applications. 2nd ed. K. Murasugi (translated from Japanese by B. Kurpita). *Modern Birkhäuser Classics*. Birkhäuser, Boston, 2008 [1996, reissued]. \$39.95 paper (341 pp.). ISBN 978-0-8176-4718-6

Material Inhomogeneities and Their Evolution: A Geometric Approach. M. Epstein, M. Elżanowski. *Interaction of Mechanics and Mathematics*. Springer, New York, 2007. \$79.95 paper (274 pp.). ISBN 978-3-540-72372-1

Mathematical Control Theory: An Introduction. J. Zabczyk. *Modern Birkhäuser Classics*. Birkhäuser, Boston, 2008 [1995, reissued]. \$39.95 paper (260 pp.). ISBN 978-0-8176-4732-2

Numerical Analysis and Applied Mathematics. T. E. Simos, G. Psihoyios, C. Tsitouras, eds. *AIP Conference Proceedings* 936. Proc. conf., Corfu, Greece, Sept. 2007. AIP, Melville, NY, 2007. \$180.00 (787 pp.). ISBN 978-0-7354-0447-2

Quantum Field Theory of Non-Equilibrium States. J. Rammer. Cambridge U. Press, New York, 2007. \$85.00 (536 pp.). ISBN 978-0-521-87499-1

Stochastic Partial Differential Equations. P.-L. Chow. *Chapman & Hall/CRC Applied Mathematics and Nonlinear Science Series* 11. Chapman & Hall/CRC Press/Taylor & Francis, Boca Raton, FL, 2007. \$79.95 (281 pp.). ISBN 978-1-58488-443-9

Tensors: The Mathematics of Relativity Theory and Continuum Mechanics. A. Das. Springer, New York, 2007. \$129.00 (289 pp.). ISBN 978-0-387-69468-9 ■

Rights & Permissions

You may make single copies of articles or departments for private use or for research. Authorization does not extend to systematic or multiple reproduction, to copying for promotional purposes, to electronic storage or distribution (including on the Web), or to republication in any form. In all such cases, you must obtain specific, written permission from the American Institute of Physics.

Contact the

**AIP Rights and Permissions Office,
Suite 1N01,
2 Huntington Quadrangle,
Melville, NY 11747-4502
Fax: 516-575-2450
Telephone: 516-576-2268
E-mail: rights@aip.org**