

American Federation of State, County, and Municipal Employees) were concerned about any infringement on their bargaining rights that adoption of a new job classification and compensation system would entail. Initially proposed arrangements for enactment of the 1985 Task Force recommendations would have temporarily suspended unions' right to bargain within the workplace, a compromise AFSCME could not support. Conflicts such as these contributed to the failure of enactment of the 1983 bill.

Acker recognizes the complex relationships between gender and class as illuminated through the Oregon case and concludes that the two are linked in a number of ways. For example, AFSCME's refusal to suspend its usual collective bargaining arrangements in order to implement the Task Force recommendations showed commitment to its own members, possibly at the expense of less advantaged women belonging to other unions or not unionized at all. She describes the conflict feminists felt in the shifting alliances they formed with labor and management, depending on the issue, and the discomfort they felt when women's interests were threatened by both sides.

Despite what at times appears to be an overwhelming amount of description of chronological events, Acker never loses the theme of gender and class influence in the comparable worth efforts in Oregon. Although she omits the names of principal figures in the story, the knowledgeable reader will be readily able to identify a number of key actors. Those with an interest in feminist scholarship and contemporary history should appreciate the care with which this important story has been reconstructed. Analytic insights regarding the nature of skill, the near immutability of job hierarchies in the workplace, and the nature of contemporary union-management conflict make the book well worth the voluminous description.

TOBY L. PARCEL
Department of Sociology,
Ohio State University,
Columbus, OH 43210

Modern Particle Physics

Particle Physics and Cosmology. P. D. B. COLLINS, A. D. MARTIN, and E. J. SQUIRES. Wiley-Interscience, New York, 1989. xvi, 496 pp., illus. \$59.95.

Don't be misled by the title of this book. One might infer that the book focuses on the particle physics-cosmology connection. This is not the case. Rather, it is a book about modern particle physics in all its guises, one of which just happens to be

"particle astrophysics." Thus, the section of 100 or so pages devoted to cosmology is shorter than the treatment of supersymmetry and string theory, for example. A more apt title might have been "Particle Physics beyond the Standard Model, Including Applications to Cosmology."

In the table of contents, everything from high energy scattering experiments and B^0 - \bar{B}^0 mixing to supergravity and orbifold compactification is listed. In spite of the breadth of material covered, the discussions have sufficient depth to give at least some idea of what each subject is about. I happen to be teaching at the moment about topological effects in gauge field theories, so I read the relevant sections in this book carefully, checking equations and so on. I found a few typos and what I think is a sign error, but in general the discussion is pretty incisive, even if brief. Other sections I examined in similar detail also seem to concentrate on the heart of the physics and present at least an overview of the relevant calculations in a way that actually gives some idea of what is being done. Modern subjects covered in this way include tests of the standard model, technicolor, grand unification, supersymmetry, and string theory.

As for the cosmology in this book, the brief tutorial is up to date, even to the extent of including a discussion of the neutrinos from Supernova 1987A. Although I think this part of the book is weaker than that devoted to particle theory, the authors have done an admirable job in assimilating and condensing much material while still providing informative discussions of such diverse issues as big-bang nucleosynthesis and cosmic string evolution. The treatment of various issues is not as deep as in the rest of the book, however. (The authors cannot seem to discern whether WIMPs [weakly interacting massive particles] are candidates for "hot" or "cold" dark matter, for example.) Nevertheless, this part of the book does at least give a fair idea of what many of the most current hot issues are.

A book like this is most useful if it can steer you on to further reading. Although the authors state in the preface that they made no attempt to reference the original literature systematically but concentrated on reviews, I found their referencing (totaling about 200 items) too scant and pretty uneven. For some subjects not only the important reviews but also original research papers were listed, whereas for others there were no references.

The book probably lacks sufficient depth for use as the sole text in an advanced graduate course, but it could serve as a useful supplemental text or as a text for an introductory or survey course, especially if

combined with other reading. More than this, the book could serve a useful purpose outside of the classroom. The effort to understand and go beyond the "standard model" has involved an unusually broad range of intellectually demanding ideas. One of the hardest problems for students beginning their research careers seems to involve gaining familiarity with the very broad collection of issues and jargon floating around in the field right now. This book can give a clear and not too painful introduction to different parts of the field. It could also be useful for physicists outside the field who might want more than a cocktail party idea of the methods and direction of particle physics today.

LAWRENCE M. KRAUSS
Center for Theoretical Physics
and Department of Astronomy,
Yale University,
New Haven, CT 06511

Books Received

Animal Biotechnology. Lorne A. Babiuk and John P. Phillips, Eds. Pergamon, Elmsford, NY, 1989. xii, 260 pp., illus. \$95. Comprehensive Biotechnology, supplement 1.

Applications of Human Performance Models to System Design. Grant R. McMillan *et al.*, Eds. Plenum, New York, 1989. x, 557 pp., illus. \$115. Defense Research Series, vol. 2. From a workshop, Orlando, FL, May 1988.

Applied Logistic Regression. David W. Hosmer, Jr., and Stanley Lemeshow. Wiley-Interscience, New York, 1989. xvi, 307 pp. \$44.95. Wiley Series in Probability and Mathematical Statistics.

Cell Culture and Somatic Cell Genetics of Plants. Vol. 6, Molecular Biology of Plant Nuclear Genes. Jeff Schell and Indra K. Vasil, Eds. Academic Press, San Diego, CA, 1989. xxvi, 494 pp., illus. \$79.50.

Chemical Sensors and Microinstrumentation. Royce W. Murray *et al.*, Eds. American Chemical Society, Washington, DC, 1989. xii, 410 pp., illus. \$89.95. ACS Symposium Series, vol. 403. From a symposium, Los Angeles, CA, Sept. 1988.

Chemically Modified Surfaces in Science and Industry. Donald E. Leyden and Ward T. Collins, Eds. Gordon and Breach, New York, 1988. xiv, 686 pp., illus. \$89. Chemically Modified Surfaces, vol. 2. From a symposium, Fort Collins, CO, June 1987.

The Chemotherapy of Malignant Diseases. Research Perspectives. H. H. Sedlacek *et al.* Karger, Basel, 1989. x, 154 pp., illus. \$66.75. Contributions to Oncology, vol. 34.

Child Maltreatment. Theory and Research on the Causes and Consequences of Child Abuse and Neglect. Dante Cicchetti and Vicki Carlson, Eds. Cambridge University Press, New York, 1989. xx, 794 pp. \$59.50; paper, \$40.

Chiral Separations. D. Stevenson and I. D. Wilson, Eds. Plenum, New York, 1988. xiv, 206 pp., illus. \$59.50. From a meeting, Guildford, U.K., Sept. 1987.

Chronopharmacology. Cellular and Biochemical Interactions. Björn Lemmer, Ed. Dekker, New York, 1989. xviii, 720 pp., illus. \$150. Cellular Clocks, vol. 3.

Computer Applications in Applied Polymer Science II. Automation, Modeling, and Simulation. Theodore Provder, Ed. American Chemical Society, Washington, DC, 1989. xiv, 568 pp., illus. \$109.95. ACS Symposium Series, vol. 404. From a symposium, Toronto, Ontario, June 1988.

Computers in the Human Context. Information Technology, Productivity, and People. Tom Forester, Ed. MIT Press, Cambridge, MA, 1989. xii, 548 pp., illus. \$37.50; paper, \$16.95.

Conservation and Management of Lakes. J. Salánki and S. Herodek, Eds. Akadémiai Kiadó, Budapest, 1989. xii, 645 pp., illus. \$64. Symposia Biologica Hungarica, vol. 38. From a conference, Keszthely, Hungary, Sept. 1988.

Consistent Classical Supergravity Theories. Martin Müller. Springer-Verlag, New York, 1989. vi, 125 pp. \$21.10. Lecture Notes in Physics, vol. 336.

Covalently Modified Antigens and Antibodies in Diagnosis and Therapy. Gerard A. Quash and John D. Rodwell, Eds. Dekker, New York, 1989. x, 236 pp., illus. \$99.75. Targeted Diagnosis and Therapy, vol. 2.

Crisis at the Front Line. The Effects of AIDS on Public Hospitals. Dennis P. Andrulis. Priority Press, New York, 1989 (distributor, Unwin Hyman, Winchester, MA). x, 93 pp. \$18.95; paper, \$9.95. A Twentieth Century Fund Paper.

Cytokines Regulating the Allergic Response. C. Sorg, Ed. Karger, Basel, 1989. viii, 105 pp., illus. \$63.50. Cytokines, vol. 2.

Developmental Neurobiology. Philippe Evard and Alexandre Minkowski, Eds. Raven, New York, 1989. xx, 315 pp., illus. \$52. Nestlé Nutrition Workshop Series, vol. 12.

Dietary Iron. Birth to Two Years. L. J. Filer, Ed. Raven, New York, 1989. xvi, 189 pp., illus. Paper, \$35. From a symposium, Dallas, TX, Dec. 1988.

Dietary $\omega 3$ and $\omega 6$ Fatty Acids. Claudio Galli and Artemis P. Simopoulos, Eds. Plenum, New York, 1989. xiv, 452 pp., illus. \$95. NATO Advanced Science Institutes Series A, vol. 171. From a workshop, Belgirate, Italy, June 1988.

Expert System Applications in Chemistry. Bruce A. Hohne and Thomas H. Pierce, Eds. American Chemical Society, Washington, DC, 1989. xii, 257 pp., illus. \$54.95. ACS Symposium Series, vol. 408. From a symposium, Los Angeles, CA, Sept. 1988.

Geophysical Data Analysis. Discrete Inverse Theory. William Menke. 2nd ed. Academic Press, San Diego, CA, 1989. xii, 289 pp., illus. \$44.95. International Geophysics Series, vol. 45.

The Globalisation of High Technology Production. Society, Space, and Semiconductors in the Restructuring of the Modern World. Jeffrey Henderson. Rout-

ledge (Routledge, Chapman and Hall), New York, 1989. xxiv, 198 pp. \$42.50.

The Great Age of the Microscope. The Collection of the Royal Microscopical Society Through 150 Years. Gerard L'E. Turner. Hilger (IOP), Bristol, U.K., 1989 (U.S. distributor, American Institute of Physics, New York). x, 379 pp., illus. \$87.50.

Growth Factors and the Ovary. Anne N. Hirshfield, Ed. Plenum, New York, 1989. xvi, 458 pp., illus. \$89.50. Sero Symposium, USA, From a workshop, Tacoma, WA, July-Aug. 1988.

Handbook of Creativity. John A. Glover, Royce R. Ronning, and Cecil R. Reynolds, Eds. Plenum, New York, 1989. xxii, 447 pp., illus. \$60. Perspectives on Individual Differences.

Lectures in the Sciences of Complexity. Daniel L. Stein, Ed. Addison-Wesley, Redwood City, CA, 1989. xxvi, 862 pp., illus. \$48.50. Santa Fe Institute Studies in the Sciences of Complexity, vol. 1. From a school, Santa Fe, NM, June-July 1988.

Leishmaniasis. The Current Status and New Strategies for Control. D. T. Hart, Ed. Plenum, New York, 1989. xiv, 1041 pp., illus. \$165. NATO Advanced Science Institutes Series A, vol. 163. From an institute, Zakynthos, Greece, Sept. 1987.

Linear Algebra and Geometry. A. I. Kostrikin and Yu. I. Manin. Gordon and Breach, New York, 1989. x, 309 pp. \$270. Algebra, Logic and Applications, vol. 1. Translated from the Russian edition (Moscow, 1986) by M. E. Alferieff.

Listening. An Introduction to the Perception of Auditory Events. Stephen Handel. MIT Press, Cambridge, MA, 1989. xiv, 597 pp., illus. \$39.95. A Bradford Book.

Model Theoretical Algebra, with Particular Emphasis on Fields, Rings, Modules. Christian U. Jensen and Helmut Lenzing. Gordon and Breach, New York, 1989. xiv, 443 pp. \$98. Algebra, Logic and Applications, vol. 2.

Physiology of Cold Adaptation in Birds. Claus Bech and Randi Eidsmo Reinertsen, Eds. Plenum, New York, 1989. x, 384 pp., illus. \$89.50. NATO Advanced Science Institutes Series A, vol. 173. From a workshop, Loen, Norway, June 1988.

Plasma Etching. An Introduction. Dennis M. Manos and Daniel L. Flamm, Eds. Academic Press, San Diego, CA, 1989. xii, 476 pp., illus. \$69.50. Plasma-Materials Interactions.

President Eisenhower and Strategy Management. A Study in Defense Politics. Douglas Kinnard. Air Force Association, Association of the U.S. Army, and Pergamon-Brassey's, McLean, VA, 1989. xviii, 169 pp. \$16.91. Reprint, 1977 ed.

A Primer of LISREL. Basic Applications and Programming for Confirmatory Factor Analytic Models. Barbara M. Byrne. Springer-Verlag, New York, 1989. xii, 184 pp., illus. \$49.

Principles of Chemical Sensors. Jiří Janata. Plenum, New York, 1989. xiv, 317 pp., illus. \$39.50. Modern Analytical Chemistry.

Polymeric Materials for Electronics Packaging and Interconnection. John H. Lupinski and Robert S. Moore, Eds. American Chemical Society, Washington, DC, 1989. xii, 499 pp., illus. \$99.95. ACS Symposium Series, vol. 407. From a symposium, Los Angeles, CA, Sept. 1988.

The Theory and Application of Forest Economics. Colin Price. Basil Blackwell, New York, 1989. xiv, 402 pp., illus. \$75; paper, \$29.95.

Women, Work, and Child Welfare in the Third World. Joanne Leslie and Michael Paolisso, Eds. Published for the American Association for the Advancement of Science by Westview, Boulder, CO, 1989. xii, 265 pp., illus. Paper, \$28.50; to AAAS members, \$22.80. AAAS Selected Symposium no. 110.

Writing to Learn Mathematics and Science. Paul Connolly and Teresa Vilardi, Eds. Teachers College Press, New York, 1989. illus. \$31.95.

AAAS Annual Meeting



15-20 February 1990 ♦ New Orleans

Have it all in New Orleans: Legendary jazz, Cajun cuisine, and the world's most comprehensive scientific conference.

Take your pick from more than 250 symposia, technical sessions, and workshops in virtually every field of scientific inquiry; intensive seminars; and short courses. Present your own research in poster sessions and meet colleagues from every corner of the scientific community while you enjoy this unique southern city.

Reserve your place now! For information and registration forms, see *Science* magazine (1 Sept., 10 or 24 Nov., or 8 Dec.); or write to: AAAS Marketing, 1333 H St., NW, Washington, DC 20005. FAX: 202-289-4021.

**AMERICAN ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE**

First Annual Conference on A Psychodynamics-Cognitive Science Interface "Person Schemas and Maladaptive Interpersonal Patterns"

Wednesday and Thursday, August 29-30, 1990
at the University of California, San Francisco

The Program on Conscious and Unconscious Mental Processes of the John D. and Catherine T. MacArthur Foundation will host two-day conferences during the last week of August. Topics will aim at convergence at the psychodynamics-cognitive science interface. Academic scientists seeking new perspectives on cognitive processing of highly emotional topics and clinician theoreticians seeking new approaches are invited to attend. A maximum of eighty participants per year and ample time for discussion (of formal presentations and videotapes of relevant clinical phenomena) will insure a chance for useful communication.

This year's conference will focus on intrapsychic schematization of self, others, and scripts for relations between self and others.

All conference costs including on-site refreshments are covered by the foundation. Each invited scientist will cover his or her own arrangements and expenses for travel, lodgings, and meals. Postdoctoral fellows on full-time stipends may apply for travel grants (four per year are available).

In requesting further information please indicate your academic appointment. One reprint would be greatly appreciated.

Write or FAX to:

PCUMP*

UCSF

LPPI Box CSN-0984

San Francisco, CA 94143

FAX: 415-476-7861

The Program on Conscious and Unconscious Mental Processes has intra- and extramural task forces for collaborative and convergent studies on person schemas, defenses, and topics of thought and communication. The director is Mardi J. Horowitz, M.D.