

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.

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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.

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