

Misner, Kip Thorne and John Wheeler. It covers differential manifolds and tensor analysis, with applications to electromagnetism and the magnetic monopole; integral calculus on manifolds, and its applications to the Lagrangian formalism, electromagnetism, the Nambu string and the Nielson-Olesen vortex; the Dirac monopole (in modern geometric form); smooth maps; the winding number; and in a final chapter, symmetries and conservation laws.

Felsager gives a very clear presentation of the use of geometric methods in particle physics. It is not possible, however, even in a book of this size (643 pages), to cover all interesting geometric and topological techniques that particle physicists are using. For those who have resisted learning this new language, his book provides a very good introduction as well as physical motivation. The inclusion of numerous exercises, worked out, renders the book useful for independent study also. I hope this book will be followed by others from authors with equal flair to provide a readable excursion into the next step.

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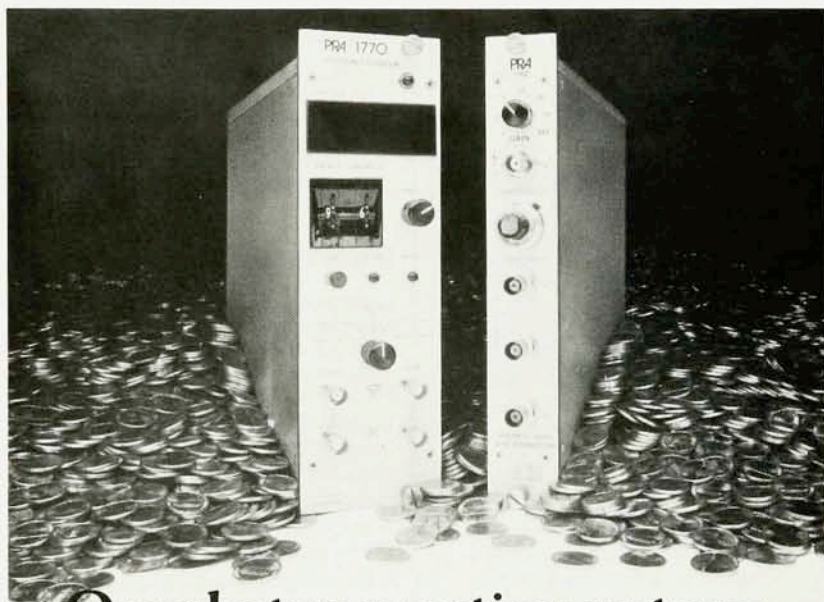
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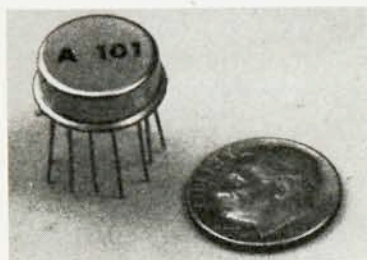
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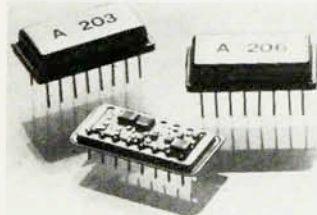
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