

# Books

## QUANTUM ELECTRODYNAMICS THEORY OF FUNDAMENTAL PROCESSES

by Richard P. Feynman

W. A. Benjamin, Inc. . . . \$3.95 each

These are two of the paperback volumes in "Frontiers in Physics," a lecture-note and reprint series designed to make available theories and viewpoints currently being developed in seminars and lectures.

The material in *Quantum Electrodynamics* was originally presented at Caltech as a graduate course in quantum mechanics by Professor Feynman, the lecture notes being taken by A. R. Hibbs, who is now chief of the Arms Control and Disarmament Study Group at Caltech's jet Propulsion Laboratory. In Professor Feynman's words: "The experiment was unsuccessful. The total material was too much for one year—." Although the course as such has not been repeated, this material in the lecture notes is much in demand. For this volume, Hibbs' notes were reworked by E. R. Huggins and H. T. Yura, both graduate students at the time.

Part of the material in the *Theory of Fundamental Processes* was first prepared for a report to the Second Conference on the Peaceful Uses of Atomic Energy, Geneva, 1958; much of it was developed in a special lecture series given by Dr. Feynman at Cornell University in 1958; most of it appeared in a graduate course at Caltech in 1959-60. Dr. Feynman's central purpose in these presentations was to discuss "all those phenomena" (in strong interactions) "for which a more or less complete quantitative theory exists." The notes have been put in final form by H. T. Yura.

## A FOR ANDROMEDA

by Fred Hoyle and John Elliot

Harper & Row . . . . . \$3.50

If a radio astronomer intercepts a message from outer space—should he answer back? *A for Andromeda* tells what might happen if he did.

The time is the late 1960's. Somewhere in England, the biggest radio

telescope in the world begins to pick up signals from somewhere in Andromeda, 200 million light years away. From the nature of the signals, it appears that another intelligence is trying to communicate with us. The message, which continues for many weeks without repeating itself, appears to be a computer program. A super-computer is built, the data is fed in, and the machine begins to print out figures which are identified as being the relative spacings of the energy levels of the hydrogen atom. When this information is pushed into the intake, the machine comes up next with a description of the structure of carbon, then the structure of protein molecules, then—well, suffice it to say that the end result of this great national effort is the production of a living, breathing, other-worldly blonde, who is given the name of Andromeda and who turns out to be just chockful of trouble.

*A for Andromeda* was originally written as a seven-part serial for television and was run by the British Broadcasting Company, apparently with great success. If reports of the excitement it stirred up on television are true, then the work must have lost something in the adaptation to novel form.

This is the third science-fiction book to come from Fred Hoyle, the British astronomer who has served as a visiting professor at Caltech, off and on, for the last five years. Like Hoyle's previous forays into this field (*The Black Cloud* and *Ossian's Ride*) the basic concept is intriguing and the execution is slapdash. Mr. Hoyle (even with a collaborator, as in the present case) wastes no time on such niceties as characterization, and writes in general like a man who has to run off in five minutes to catch a bus. Seasoned science-fiction fans, who are in the habit of reading that way too, probably won't mind a bit. But ordinary readers are likely to be more than a little confused, not to mention winded.

## Science Paperbacks

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