



# CONTENTS

	PAGE
INVARIANCE PRINCIPLES OF NUCLEAR PHYSICS, <i>G. C. Wick</i> . . . . .	1
THE OPTICAL MODEL AND ITS JUSTIFICATION, <i>Herman Feshbach</i> . . . . .	49
HYPERFRAGMENTS, <i>W. F. Fry</i> . . . . .	105
ANTINUCLEONS, <i>Emilio Segrè</i> . . . . .	127
GAMMA-RAY SPECTROSCOPY BY DIRECT CRYSTAL DIFFRACTION, <i>Jesse W. M. DuMond</i> . . . . .	163
CONCEPTUAL ADVANCES IN ACCELERATORS, <i>David L. Judd</i> . . . . .	181
THE PRIMARY COSMIC RADIATION, <i>H. V. Neher</i> . . . . .	217
THE RADIOACTIVITY OF THE ATMOSPHERE AND HYDROSPHERE, <i>Hans E. Suess</i> . . . . .	243
GEOCHRONOLOGY BY RADIOACTIVE DECAY, <i>L. T. Aldrich and G. W. Wetherill</i> . . . . .	257
NUCLEAR ASTROPHYSICS, <i>A. G. W. Cameron</i> . . . . .	299
PRACTICAL CONTROL OF RADIATION HAZARDS IN PHYSICS RESEARCH, <i>Burton J. Moyer</i> . . . . .	327
CELLULAR RADIOBIOLOGY, <i>Thomas H. Wood</i> . . . . .	343
INFORMATION THEORY IN RADIOBIOLOGY, <i>Henry Quastler</i> . . . . .	387