

TABLE OF CONTENTS

	PAGE
The new quantum electrodynamics. By HERMAN FESHBACH.....	1
A method of analytical continuation in the eigenvalue and scattering problems of quantum theory (Abstract). By EUGENE FEENBERG.....	20
Electromagnetism without metric. By J. L. SYNGE.....	21
Discontinuity in electromagnetism. By W. H. WATSON.....	49
The factorization method and its application to differential equations in theoretical physics. By LEOPOLD INFELD.....	58
Nonlinear electrical networks. By R. J. DUFFIN.....	66
Ray theory vs. normal mode theory in wave propagation problems. By C. L. PEKERIS....	71
Systems of Wiener-Hopf integral equations and their application to some boundary value problems in electromagnetic theory. By ALBERT E. HEINS.....	76
Orbits of charged particles in constant fields (Abstract). By A. H. TAUB.....	82
Reflections from bends and corners in electromagnetic wave guides (Abstract). By S. O. RICE.....	83
Wave propagation in electromagnetic horns (Abstract). By A. F. STEVENSON.....	84
Problems related to measuring the field strength of high frequency electromagnetic fields (Abstract). By ROHN TRUELL.....	85
Aberration correction with electron mirrors (Abstract). By E. G. RAMBERG.....	86
Distribution problems in the theory of random noise (Abstract). By MARK KAC.....	87
Entropy and information (Abstract). By NORBERT WIENER.....	89
The statistical theory of message transmission (Abstract). By Y. W. LEE.....	90
Transient response and the central limit theorem of probability (Abstract). By HENRY WALLMAN.....	91