# Philosophy of Science

## Volume 34 1967

Reprinted with the permission of the original publisher by Periodicals Service Company Hudson, NY 2021

Printed on acid-free paper.

This reprint was reproduced from the best original edition copy available.

NOTE TO THE REPRINT EDITION: In some cases full page advertisements which do not add to the scholarly value of this volume have been omitted. As a result, some reprinted volumes may have irregular pagination.

# PHILOSOPHY of SCIENCE

Official Journal of the Philosophy of Science Association



VOLUME 34, NUMBER 1

March, 1967

PRINTED BY THE EDEN PUBLISHING HOUSE, ST. LOUIS MISSOURI, U.S.A.

### PHILOSOPHY OF SCIENCE

#### JOURNAL OF THE PHILOSOPHY OF SCIENCE ASSOCIATION

CO-SPONSORED BY THE INSTITUTE FOR THE UNITY OF SCIENCE AND BY

SECTION L OF THE AMERICAN ASSOCIATION FOR THE

ADVANCEMENT OF SCIENCE

#### **EDITORIAL BOARD:**

- RICHARD S. RUDNER, Department of Philosophy, Washington University, St. Louis, Missouri 63130, Editor in Chief
- ERNEST W. ADAMS, Department of Philosophy, University of California, Berkeley, California 94720
- GUSTAV BERGMANN, Department of Philosophy, University of Iowa, Iowa City, Iowa 52240
- MAY BRODBECK, Department of Philosophy, University of Minnesota, Minneapolis, Minnesota 55455
- ARTHUR BURKS, Department of Philosophy, University of Michigan, Ann Arbor, Michigan 48104
- C. WEST CHURCHMAN, Graduate School of Business Administration, University of California, Berkeley, California 94720
- THEODOSIUS DOBZHANSKY, The Rockefeller University, New York, New York 10021
- ADOLF GRÜNBAUM, Department of Philosophy, University of Pittsburgh, Pittsburgh, Pennsylvania 15213
- EDWARD MADDEN, Department of Philosophy, State University of New York, Buffalo, New York 14214
- HENRY MARGENAU, Department of Physics, Yale University, New Haven, Connecticut 06520.
- GERALD J. MASSEY, Department of Philosophy, Michigan State University, East Lansing, Michigan 48823, Managing Editor
- WESLEY C. SALMON, Department of History and Philosophy of Science, Indiana University, Bloomington, Indiana 47401
- MELFORD E. SPIRO, Department of Anthropology, The University of Chicago, Chicago, Illinois 60637
- LEWIS K. ŽERBY, Department of Philosophy, Michigan State University, East Lansing, Michigan 48823

BOOK REVIEWS:

James Van Evra, Department of Philosophy, University of Waterloo, Waterloo, Ontario, Canada

**GOVERNING BOARD OF THE ASSOCIATION:** 

ADOLF J. GRÜNBAUM, President

WESLEY C. SALMON, Vice-President

GERALD J. MASSEY, Secretary-Treasurer

GUSTAV BERGMANN RUDOLF CARNAP C. WEST CHURCHMAN THEODOSIUS DOBZHANSKY CURT J. DUCASSE (Past President) HERBERT FEIGL PHILIPP FRANK (Past President) LLEWELLYN GROSS NORWOOD RUSSELL HANSON THOMAS S. KUHN HENRY MARCENAU (Past President) ERNEST NACEL (Past President) RICHARD RUDNER ISRAEL SCHEFFLER S. S. STEVENS

© 1967 by The Philosophy of Science Association PRINTED BY EDEN PUBLISHING HOUSE, ST. LOUIS, MISSOURI, U.S.A.

Subscription price \$10.00 per Volume. Single numbers \$4.00 For student subscriptions at the rate of \$5.00 per volume, address inquiries to the Managing Editor.

### CONTENTS

An Announcement	iii
IMPRECISION AND EXPLANATION, D. H. MELLOR	1
DISPOSITIONAL PROPERTIES, HERBERT HOCHBERG	10
POSTULATES OF RATIONAL PREFERENCE, ALEX C. MICHALOS	18
THEORY IN HISTORY, LEON GOLDSTEIN	23
DEDUCTIVE EXPLANATION AND PREDICTION REVISITED, W. A. SUCHTING	41
DISCUSSION: KUHN ON SCIENTIFIC REVOLUTIONS, RICHARD L. PURTILL	53
DISCUSSION: ON THE D-THESIS, J. W. SWANSON	59
BOOK REVIEWS	69
Abstracts, Synthese	86
Membership List	88