

# **Philosophy of Science**

**Volume 38  
1971**

**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 38, NUMBER 1

March, 1971

# PHILOSOPHY OF SCIENCE

JOURNAL OF THE PHILOSOPHY OF SCIENCE ASSOCIATION

## 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  
PETER D. ASQUITH, Department of Philosophy, *Michigan State University*, East Lansing, Michigan 48823, *Managing Editor*  
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, *University of Pittsburgh*, Pittsburgh, Pennsylvania, 15213  
ALBERTO PASQUINELLI, Facoltà Di Lettere E Filosofia, Università Degli Studi Di Bologna, *University of Bologna*, Bologna, Italy  
WESLEY C. SALMON, Department of History and Philosophy of Science, *Indiana University*, Bloomington, Indiana 47401  
J. J. C. SMART, Department of Philosophy, *University of Adelaide*, Adelaide, Australia  
MELFORD E. SPIRO, Department of Anthropology, *The University of California at San Diego*, La Jolla, California, 92038  
PATRICK SUPPES, Department of Philosophy, *Stanford University*, Palo Alto, California 94301  
LEWIS K. ZERBY, Department of Philosophy, *Michigan State University*, East Lansing, Michigan 48823

## BOOK REVIEWS:

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

## ASSISTANT EDITORS:

James J. Sweeney and Garnet W. Jex, Department of Philosophy, *Washington University*, St. Louis, Missouri 63130

## GOVERNING BOARD OF THE ASSOCIATION:

ADOLF GRÜNBAUM, *President*

ISRAEL SCHEFFLER, *Vice-President*

GERALD J. MASSEY, *Secretary-Treasurer*

CURT J. DUCASSE

MARY B. HESSE

JAAKKO HINTIKKA

RICHARD C. JEFFREY

ERNAN MCMULLIN

HENRY MARGENAU

ERNEST NAGEL

RICHARD RUDNER

J. J. C. SMART

H. TORNEBOHM

© 1971 by The Philosophy of Science Association

MADE AND PRINTED IN GREAT BRITAIN BY

WILLIAM CLOWES AND SONS, LIMITED, LONDON, BECCLES AND COLCHESTER

Subscription price \$15.00 per Volume. Single numbers \$5.00.

For student subscriptions at the rate of \$5.00

per volume, address inquiries to the Managing Editor.

## CONTENTS\*

<b>PHYSICAL AND PSYCHIC ENERGY, ROBERT K. SHOPE</b> .....	1
<b>THE PLACE OF THE EXPLANATION OF PARTICULAR FACTS IN SCIENCE, WILLIAM P. ALSTON</b> .....	13
<b>TOWARDS A REASSESSMENT OF COMTE'S 'MÉTHODE POSITIVE', LARRY LAUDAN</b> .....	35
<b>IMMODEST INDUCTIVE METHODS, DAVID LEWIS</b> .....	54
<b>HUME AND THE FIERY FURNACE, EDWARD H. MADDEN</b> .....	64
<b>DISCUSSION: ON THE CONCEIVABILITY OF MECHANISM, MICHAEL MARTIN</b> .....	79
<b>DISCUSSION: FUNCTIONAL STATEMENTS IN BIOLOGY, MICHAEL E. RUSE</b> .....	87
<b>DISCUSSION: FORMAL MODELS AND ACHINSTEIN'S "ANALOGIES", T. R. GIRILL</b> .....	96
<b>DISCUSSION: METHODOLOGY AS AN EXERCISE IN ECONOMIC ANALYSIS, LAWRENCE A. BOLAND</b> .....	105
<b>DISCUSSION: ON AN ARGUMENT AGAINST REDUCTION SENTENCES, JAN BERG</b> .....	118
<b>DISCUSSION: SUPERCALIFRAGILISTIC REDUCTION: A REPLY TO JAN BERG, ISRAEL SCHEFFLER</b> .....	121
<b>BOOK REVIEWS</b> .....	122
<i>Fate, Logic, and Time</i> , Steven M. Cahn; <i>Paul Fitzgerald—Probleme und Resultate der Wissenschaftstheorie und Analytische Philosophie. Band I: Wissenschaftliche Erklärung und Begründung</i> , Wolfgang Stegmüller; <i>Joseph Kockelmans</i>	
<b>RECENT BOOKS</b> .....	133
<b>ABSTRACTS, <i>Synthese</i></b> .....	134
<b>ANNOUNCEMENTS</b> .....	138
<b>MEMBERSHIP LIST</b> .....	139

\*The contents of *Philosophy of Science* are indexed in *Science Citation Index*.