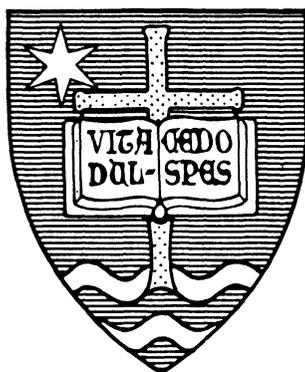


NOTRE DAME JOURNAL
OF
FORMAL LOGIC

VOLUME XV, NUMBER 2

APRIL 1974



PUBLISHED QUARTERLY BY THE
UNIVERSITY OF NOTRE DAME, NOTRE DAME, INDIANA

NOTRE DAME JOURNAL OF FORMAL LOGIC

Bolesław Sobociński, *Editor*

Managing Editor:
John Thomas Canty

Business Manager:
Ann W. Lauer

Editorial Board

Ignacio Angelelli
F. Gonzalez Asenjo
Nuel D. Belnap, Jr.
Ivan Boh
William W. Boone
Karel L. de Bouvère

Robert Bull
George Goe
Hugues Leblanc
Gerald Massey
Elliott Mendelson

Marian B. Pour-El
Luis Elpidio Sanchis
Wilson E. Singletary
Vito F. Sinisi
Ivo Thomas
J. Jay Zeman

Volume XV, Number 2, April 1974

CONTENTS

A categorical equivalence of proofs. By <i>Manfred E. Szabo</i>	177
Various systems of set theory based on combinatory logic. By <i>M. W. Bunder</i>	192
Professor Quine and real classes. By <i>James K. Feibleman</i>	207
Non-assertoric inference. By <i>Robert P. MacArthur</i> and <i>David Welker</i>	225
On referentiality and its conditions. By <i>Chung-ying Cheng</i>	245
Admissible rules, derivable rules, and extendible logistic systems. By <i>Howard C. Wasserman</i>	265
Über eine Erweiterung der algebraischen Operationen. By <i>Günther Frei-Imfeld</i>	279
A study of Z modal systems. By <i>R. I. Goldblatt</i>	289
K and Z . By <i>George F. Schumm</i>	295
Ockham on self-reference. By <i>Paul Vincent Spade</i>	298
Sind die deontischen Funktoren distributiv? By <i>Bohuslav T. Peklo</i>	301
Matrix calculi SS1M and SS1I compared with axiomatic systems. By <i>J. Czermak</i>	312
Boolean subtractive algebras. By <i>Thomas M. Hearne</i> and <i>Carl G. Wagner</i>	317
A strong completeness theorem for 3-valued logic. By <i>H. Goldberg</i> , <i>H. Leblanc</i> and <i>G. Weaver</i>	325
The inadequacy of Hughes and Cresswell's semantics for the CI systems. By <i>Zane Parks</i> and <i>Terry L. Smith</i>	331
Semantics for contingent identity systems. By <i>Zane Parks</i>	333
Many-one degrees associated with partial propositional calculi. By <i>W. E. Singletary</i>	335
A result of extending Bochvar's 3-valued logic. By <i>Kenneth W. Collier</i>	344
On a passage of Aristotle. By <i>Ivo Thomas</i>	347
A note on natural deduction. By <i>Alex Blum</i>	349
Deductive inferences from particular to general. By <i>Howard Pospesil</i> and <i>Charles G. Werner</i>	351

Notre Dame Journal of Formal Logic is published quarterly by the University of Notre Dame in January, April, July and October of each year. The Journal is composed by Beljan, Ann Arbor, Michigan and printed by Cushing-Malloy, Inc., Ann Arbor, Michigan. Second-class postage paid at Notre Dame, Indiana 46556.

Authors should consult the "Guide to authors" for editorial information. Articles and editorial correspondence should be sent to *B. Sobociński, Editor*, P.O. Box 28, Notre Dame, Indiana 46556, U.S.A.

Subscriptions are \$16.00 per year for institutions and \$10.00 for individuals. Back volumes of the Journal may be ordered at the applicable subscription prices. Orders for subscriptions and back volumes (accompanied by payment), and changes of address should be sent to the *Business Manager*, P.O. Box 5, Notre Dame, Indiana 46556, U.S.A.

Copyright ©1974 by the University of Notre Dame. All rights reserved.