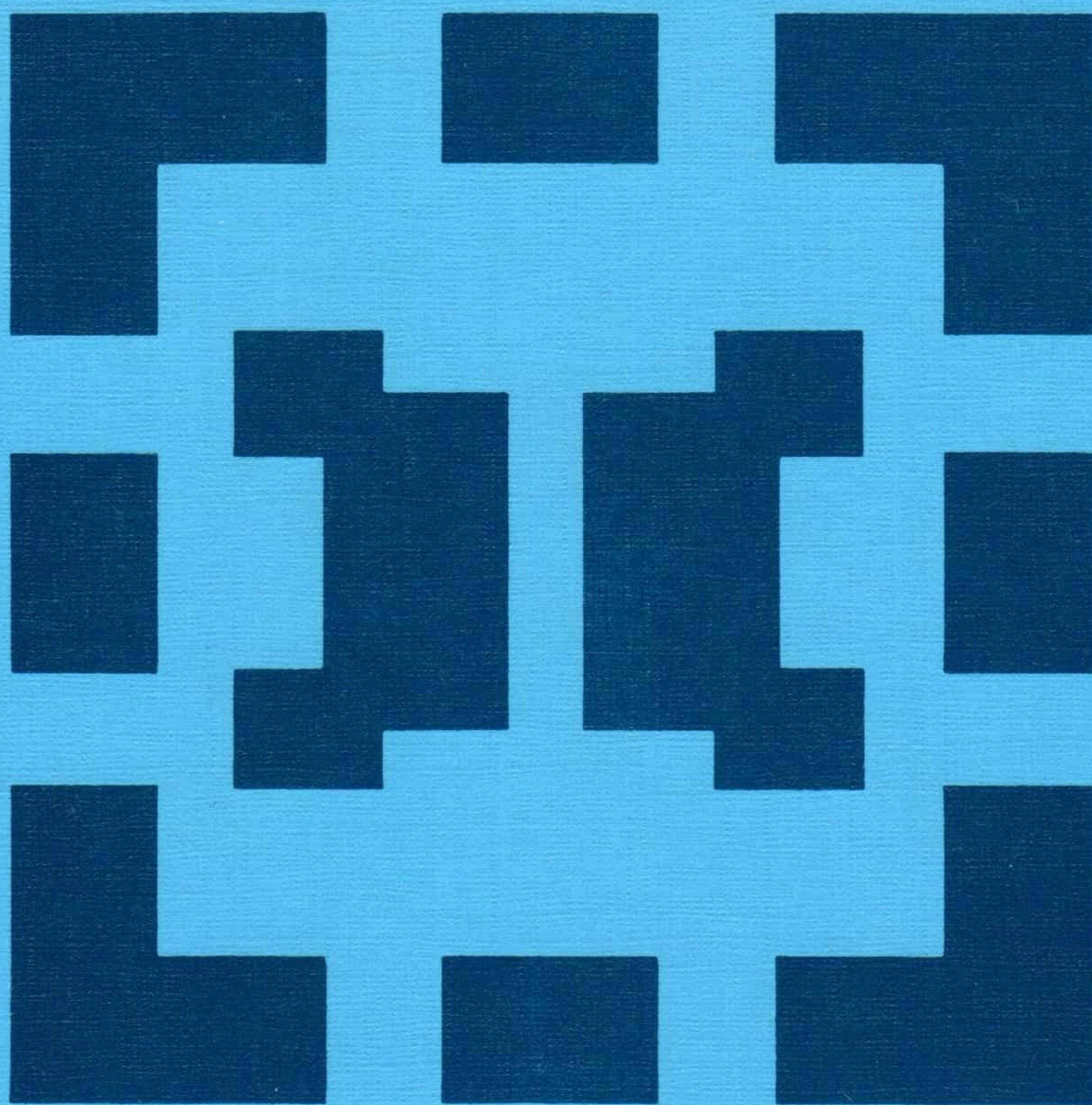


Mathematics and Its Applications

S. S. Kutateladze (ed.)

**Vector Lattices and
Integral Operators**



Kluwer Academic Publishers

Mathematics and Its Applications

Managing Editor:

M. HAZEWINKEL

Centre for Mathematics and Computer Science, Amsterdam, The Netherlands

Volume 358

Vector Lattices and Integral Operators

edited by

S. S. Kutateladze

*Sobolev Institute of Mathematics,
Siberian Branch of the Russian Academy of Sciences,
Novosibirsk, Siberia, Russia*



KLUWER ACADEMIC PUBLISHERS

DORDRECHT / BOSTON / LONDON

A C.I.P. Catalogue record for this book is available from the Library of Congress

ISBN-13: 978-94-010-6571-9
DOI: 10.1007/ 978-94-009-0195-7

e-ISBN-13: 978-94-009-0195-7

Published by Kluwer Academic Publishers,
P.O. Box 17, 3300 AA Dordrecht, The Netherlands.

Kluwer Academic Publishers incorporates
the publishing programmes of
D. Reidel, Martinus Nijhoff, Dr W. Junk and MTP Press.

Sold and distributed in the U.S.A. and Canada
by Kluwer Academic Publishers,
101 Philip Drive, Norwell, MA 02061, U.S.A.

In all other countries, sold and distributed
by Kluwer Academic Publishers Group,
P.O. Box 322, 3300 AH Dordrecht, The Netherlands.

This is a completely revised and updated
translation of the original Russian work
Vector Lattices and Integral Operators,
A.V. Bukhvalov, V.B. Korotkov, A.G. Kusraev,
S.S. Kutateladze and B.M. Marakov,
Novosibirsk, Nauka © 1992.
This book was typeset using AMS-TEX.

All Rights Reserved
© 1996 Kluwer Academic Publishers
Softcover reprint of the hardcover 1st edition 1996

No part of the material protected by this copyright notice may be reproduced or
utilized in any form or by any means, electronic or mechanical,
including photocopying, recording or by any information storage and
retrieval system, without written permission from the copyright owner.

Vector Lattices and Integral Operators

edited by

S. S. KUTATELADZE

*Sobolev Institute of Mathematics,
Siberian Branch of the Russian Academy of Sciences,
Novosibirsk, Siberia, Russia*

This volume is devoted to modern accomplishments in the field of vector lattices and integral operators which were achieved in Russia during the last two decades.

Nonstandard methods are elaborated for the analysis of vector lattices under multiplication by an arbitrary bounded operator for various classes of operators which are defined in terms of order. Also, several approaches to the solution of the J. von Neumann problem on the conditions for integrality of a linear operator are treated, and full information is given on the solution of some problems posed by P. Halmos and V. Sunder.

Audience

This book is intended for mathematicians, students and postgraduates interested in functional analysis, operator theory, geometry on Banach spaces and vector lattices.

