

Semyon Grigorevich Gindikin

Tales of Physicists and Mathematicians

Translated by Alan Shuchat

With 30 Illustrations



Birkhäuser
Boston · Basel

Semyon Grigorevich Gindikin
A.N. Belozersky Laboratory of Molecular
Biology and Bioorganic Chemistry
Moscow State University
Moscow 119899
U.S.S.R.

Alan Shuchat (*Translator*)
Department of Mathematics
Wellesley College
Wellesley, MA 02181
U.S.A.

Library of Congress Cataloging-in-Publication Data

Gindikin, S. G. (Semyon Grigor'evich)

Tales of physicists and mathematicians.

Translation of: *Rasskazy o fizikakh i matematikakh.*

Bibliography: p.

1. Physics—History.
2. Mathematics—History.
3. Science—History. I. Title.

QC7.G5613 1988 530'.09 87-24971

CIP-Kurztitelaufnahme der Deutschen Bibliothek

Tales of physicists and mathematicians / Semyon
Grigorevich Gindikin. Transl. by Alan Shuchat. —
Boston ; Basel : Birkhäuser, 1988.

Einheitssacht.: *Rasskazy o fizikakh i
matematikakh* (engl.)

ISBN-13: 978-1-4612-8409-3 e-ISBN-13: 978-1-4612-3942-0

DOI: 10.1007/978-1-4612-3942-0

NE: Gindikin, Semen G. [Hrsg.]; EST

Original Russian edition: *Rasskazy o fizikakh i matematikakh.*

Quant Library, vol. 14, Moscow: Nauka; first edition:
1981, second edition: 1985.

© Birkhäuser Boston, 1988

Softcover reprint of the hardcover 1st edition 1988

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of the copyright owner.

Typeset by Best-set Typesetter Ltd., Hong Kong.

9 8 7 6 5 4 3 2 1

Contents

From the Foreword to the Russian Edition	vii
Translator's Note	xi
<i>Ars Magna (The Great Art)</i>	1
Appendix: From <i>De Vita Propria Liber (The Book of My Life)</i>	19
Two Tales of Galileo	25
I. The Discovery of the Laws of Motion	25
II. The Medicean Stars	42
Appendix: Olaf Römer's Conjecture	71
Christiaan Huygens, Pendulum Clocks, and a Curve "Not At All Considered by the Ancients"	75
Appendix: Part Five of <i>Horlogium Oscillatorium</i>	92
Blaise Pascal	95
Prince of Mathematicians	115
I. Gauss' Debut	115
II. The Golden Theorem	131
III. Royal Days	141
Appendix: Construction Problems Leading to Cubic Equations	154