CREATION of the UNIVERSE

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World Scientific

Singapore • New Jersey • London • Hong Kong

Published by

World Scientific Publishing Co. Pte. Ltd.

P O Box 128, Farrer Road, Singapore 9128

USA office: Suite 1B, 1060 Main Street, River Edge, NJ 07661

UK office: 73 Lynton Mead, Totteridge, London N20 8DH

Library of Congress Cataloging-in-Publication Data

Fang, Li Zhi.

Creation of the universe.

1. Cosmology. 2. Astrophysics. I. Li, Shu Xian. II. Title.

QB981.F17 1989 523.1 88-33962

ISBN 9971-50-600-9

ISBN 9971-50-601-7 (pbk.)

First published: 1989

First reprint: 1993

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Printed in Singapore by Utopia Press.

*To G. Borner, Hong-Yee Chiu, T. Kiang, R. Ruffini,
H. Sato, Orville Schell, J. A. Wheeler*

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PREFACE

The birth of the universe as a whole is now a challenging problem for physics. The evolution of the universe from nothing is described by the big bang theory. *Creation of the Universe* is the story of advances in cosmology and how they were made. It traces the developments of the big bang theory, from the expansion of the universe to quantum cosmology, from the formation of large scale structures to the physics of the Planck Era. It is also the story of the scientists involved in the search, their frustrations, hardships, hopes and joys when great discoveries are made. The theme of *Creation of the Universe* is similar to an earlier book *From Newton's Laws to Einstein's Theory of Relativity* by Fang Li Zhi and Chu Yao Quan, namely, the unification of the universe. In the book *From Newton's Laws to Einstein's Theory of Relativity* we emphasized the unification of laws which are obeyed by everything. In *Creation of the Universe* we emphasize the unification of the origin of everything.

As with the former book, in *Creation of the Universe* we avoid as much as possible the use of advanced mathematics. Instead we present theories and observations of cosmology in a way that the reader can easily understand the basic concepts related to global problems in cosmology.

We wish to, at this point, mention the trouble we had at the beginning of 1987. At that time one of us (Fang Li Zhi) was forced to move from the position of vice-president of the University of Sciences and Technology of China to the Beijing Astronomical Observatory because of the accusation that Fang Li Zhi had stirred up and catalyzed the student's demonstrations

for greater freedom and more democracy in China. As a consequence, this book was almost cancelled in its Chinese edition. However, unfaltering and loyal support from many colleagues finally allowed the Chinese edition to be published according to schedule in 1987. We are very grateful to all those people who made contributions in terms of moral support as mentioned above.

Fang Li Zhi

Li Shu Xian

Beijing, 18th November 1988

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