A Garden of Quanta

Essays in Honor of
Hiroshi Ezawa

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Hiroshi Ezawa

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World Scientific

New Jersey • London • Singapore • Hong Kong

Published by

World Scientific Publishing Co. Pte. Ltd.

5 Toh Tuck Link, Singapore 596224

USA office: Suite 202, 1060 Main Street, River Edge, NJ 07661

UK office: 57 Shelton Street, Covent Garden, London WC2H 9HE

British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library.

First published 2003

Reprinted 2004

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ISBN 981-238-445-6

This book is printed on acid-free paper.

Printed in Singapore by Mainland Press

Professor Hiroshi Ezawa

Preface

The *Garden of Quanta* is in full bloom of quantum theory, and everyone who visits there can enjoy variety of the blossoms.

The *Garden* is in fact filled up with a collection of reviews and essays about the recent developments in the areas of quantum physics, covering a wide range of themes such as Quantum mechanics, Path integrals and stochastic processes, Quantum field theory, Statistical mechanics, Mathematical problems, and History. The authors are the experts both from east and west. The articles are written on the graduate level, but most of them are accessible, if not in fine details, to aspiring undergraduates. The book as a whole will serve as a good guide map of vast, fertile grounds of quantum physics for beginning graduate students and undergraduates who are looking for directions to go into.

The articles in *A Garden of Quanta* are dedicated to Professor Hiroshi Ezawa by his friends and students to celebrate his seventieth birthday. Born in 1932 in Tokyo, graduated from Department of Physics, the University of Tokyo in 1955, and earned Ph.D. in 1960, Ezawa took a post of research associate at the University of Tokyo. Then, after spending four years in U.S.A. and Germany doing research in mathematical aspects of quantum field theory, he moved to Gakushuin University in Tokyo in 1967, and has been engaged in reserch and teaching of physics and mathematics for about thirty-five years as an associate professor at first and then as a professor.

His research career embraces vast areas from quantum to statistical physics, particle physics, solid state physics, theory of gravity, and mathematics. The variety of subject matters presented in the *Garden* is a reflection of his wide interests. A detailed review of his activities is given in the article

by Keiji Watanabe in this book. Also, a list of his papers and books can be found in the pages that follow.

His activities have not been limited to research and teaching, but have extended further to social matters. As a president of the Physical Society of Japan (1995/96) and a member of the Science Council of Japan (1997 – present), he has contributed much to developing and improving the environment of research and education of the science in Japan. He has also been strongly interacting with physics teachers in high schools, once coauthoring a textbook of high school physics.

We wish him many more years of good health and successes.

We would like to express our sincere gratitudes to all the contributors to this book for their collaborations. Many thanks are also due to Dr. Jitan Lu of the World Scientific Publishing Co. Pte. Ltd. for his collaboration and fine works in producing this book.

March, 2003

Editors

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