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Edited by

Maurice Lévy and Jean-Louis Basdevant

Laboratory of Theoretical Physics and High Energies Université Pierre et Marie Curie Paris, France

David Speiser and Jacques Weyers

Institute of Theoretical Physics Université Catholique de Louvain Louvain-la-Neuve, Belgium

Raymond Gastmans

Institute of Theoretical Physics Katholieke Universiteit Leuven Leuven, Belgium

and

Maurice Jacob

Theory Division C.E.R.N. Genève, Switzerland

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No part of this book may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, microfilming, recording, or otherwise, without written permission from the Publisher PREFACE

The 1979 Cargèse Summer Institute on Quarks and Leptons was organized by the Université Pierre et Marie Curie, Paris (M. LEVY and J.-L. BASDEVANT), CERN (M. JACOB), the Université Catholique de Louvain (D. SPEISER and J. WEYERS), and the Katholieke Universiteit te Leuven (R. GASTMANS), who, like in 1975 and 1977, had joined their efforts and worked in common. It was the 20th Summer Institute held at Cargèse and the 5th one organized by the two institutes of theoretical physics at Leuven and Louvain-la-Neuve.

This time, the school was dominated by the impressive advances which were made in the field of perturbative quantum chromodynamics and its applications to high energy phenomena involving strongly interacting particles. The unification of weak and electromagnetic interactions being well established, a new picture in particle physics emerges wherein a possible unification of weak, electromagnetic, and strong forces is put forward. Its consequences were also discussed in detail. Finally, to complete the picture of the present status of high energy physics, experimentalists from the major laboratories around the world reported on the latest developments in electron-positron scattering, neutrino induced reactions, and hadron collisions.

We owe many thanks to all those who have made this Summer Institute possible!

Thanks are due to the Scientific Committee of *NATO* and its President for a generous grant and especially to the head of *the Scientific Affairs Division*, Dr. M. DI LULLO for his constant help and encouragements.

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Mostly, however, we would like to thank all lecturers and participants who came from 24 different countries: the willingness of the former to answer all questions and the keen interest of the latter provided the stimulus which made (we hope) this Institute a success.

> M. LEVY J.-L. BASDEVANT M. JACOB

- D. SPEISER
- J. WEYERS
- R. GASTMANS

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