Acta Physica Austriaca

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Paul Urban, Graz

Supplementum I (1965):

Weak Interactions and
Higher Symmetries

Supplementum II (1965):

Quantum Electrodynamics
(*Vergriffen*)

Supplementum III (1966):

Elementary Particle Theories

Supplementum IV (1967):

Special Problems in
High Energy Physics

Supplementum V (1968):

Particles, Currents, Symmetries

Supplementum VI (1969):

Particle Physics

Supplementum VII (1970):

Developments in
High Energy Physics

Supplementum VIII (1971):

Concepts in Hadron Physics

Topics in Applied Quantumelectrodynamics

By

Prof. Dr. Paul Urban

Institute of Theoretical Physics,
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In the framework of quantumelectrodynamics, as a well defined and well known theory, exact results can be obtained for numerous applications, but these are not always summarized and discussed extensively in the standard textbooks. Therefore a monograph restricted only to special applications, which are treated in close connexion with experiments, will fill this gap, especially since the author is successfully engaged in this kind of research for many years.

This book is divided into two parts and an appendix. After a discussion of the Foldy-Wouthuysen transformation the first part describes electron-proton and electron-deuteron scattering, including electromagnetic form factors and their dispersion theoretical treatment. The second part represents the subject of radiative corrections to electron scattering processes. In the appendix an introduction to the theory of free boson and fermion fields is given.

This book will be important for graduate students and research workers in the field of elementary particles, especially for those interested in topics of quantumelectrodynamics.

ACTA PHYSICA AUSTRIACA / SUPPLEMENTUM VIII

CONCEPTS IN HADRON PHYSICS

PROCEEDINGS OF THE
X. INTERNATIONALE UNIVERSITÄTSWOCHEN
FÜR KERNPHYSIK 1971 DER KARL-FRANZENS-UNIVERSITÄT
GRAZ, AT SCHLADMING (STEIERMARK, AUSTRIA)
1st MARCH—13th MARCH 1971

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THEODOR KÖRNER-STIFTUNGSFONDS
ZUR FÖRDERUNG VON WISSENSCHAFT UND KUNST

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PAUL URBAN
GRAZ

WITH 40 FIGURES

1971

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Ladies and Gentlemen, dear Colleagues!

It is a great pleasure for me to welcome you here in Schladming at the opening ceremony of the 10. Internationale Universitätswochen für Kernphysik der Universität Graz.

I have the special honour to welcome the guests of honour as well as the representatives of press and radio whose presence indicates also the public interest in our school. First of all I welcome Ministerialoberkommissär Dipl. Ing. O. ZELLHOFER, the representative of the Bundesministerium für Wissenschaft und Forschung; the representative of the Karl-Franzens-Universität Graz, Dekan der philosophischen Fakultät Prof. Dr. A. EDER; the representatives of the Steiermärkische Landesregierung Landesrat Prof. Dr. K. JUNGWIRTH, Abgeordneter zum Landtag Direktor H. LAURICH, and Oberregierungsrat Dr. W. HOLZMANN.

Finally I welcome the Mayor of our host city Schladming H. AINHORN and the Stadtrat of Schladming. To them I would like to express our thanks for their hospitality which they extend every year to us, and their generous cooperation in the organization of the meetings. Especially I want to thank our lecturers and the participants at this school for their coming and wish to all of you a successful and pleasant stay in this beautiful city of Schladming.

PAUL URBAN

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