

PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM
ON THEORETICAL PHYSICS

DEDICATED TO IWO BIAŁYNICKI-BIRULA
IN HONOUR OF HIS 60TH BIRTHDAY

Warsaw, Poland, October 28 – 30, 1993

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WARSAW

POLISH ACADEMY OF SCIENCES
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Iwo Białynicki-Birula

Introduction

This issue of *Acta Physica Polonica* is dedicated to Professor Iwo Białynicki-Birula, member of the Polish Academy of Sciences, on the occasion of his sixtieth birthday. The Centrum Fizyki Teoretycznej PAN organized an International Symposium on Theoretical Physics in Warsaw in honor of Professor Iwo Białynicki-Birula on 28 to 30 of October of 1993. With a few exceptions the papers published here contain the lectures delivered at the symposium. F. Persico has submitted his contribution but was unable to attend. J. Klauder spoke on a different subject.

Iwo Białynicki-Birula was born in Warsaw in 1933. He graduated from physics department of Warsaw University in 1956. Subsequently he received his Ph.D. there in 1959 under advice of Leopold Infeld. In 1962 he obtained the highest degree (habilitation) and soon became a Professor of Theoretical Physics in the Institute of Theoretical Physics of Warsaw University. He has held a number of visiting positions in the USA (Rochester, Pittsburgh, USC in Los Angeles, Tucson) and in Germany (Frankfurt). He is the author of over 200 research papers and several monographs on quantum electrodynamics and quantum mechanics. He is an elected member of Polish and Norwegian Academies of Sciences.

Iwo Białynicki-Birula is a very active theoretical physicist with particularly broad interests ranging from the field theory, general relativity and quantum electrodynamics, through quantum optics to plasma physics. He has always maintained intensive international scientific cooperative collaborations. He has particularly strong links with American physicists. The list of participants of the symposium reflects both his broad interests and contacts well.

We felt compelled to celebrate his anniversary for many reasons. Not only to express our appreciation for his role as one of the best Polish physicists. He is also an excellent educator and whole generations of Warsaw physicists enjoyed attending his demanding physics courses. After many years of teaching at the Warsaw University he has enthusiastically joined our new educational initiative at the Academy of Sciences: the College of Science launched in the fall of 1993.

Professor Białynicki-Birula is also a successful organizer. He proposed and organized our Centrum Fizyki Teoretycznej (former Institute for Theoretical Physics). He was also its first director setting us on the right track. Invaluable also was the role Białynicki-Birula played in helping us start our international carriers, learn the world and break the complexes of working in this remote country. This proved to be particularly valuable when, after the fall of communism, our country opened to the West. Suddenly all segments of our society are now expected to compete with the world. We are particularly well prepared for this competition. Hence you will find more optimism in the Centrum than almost anywhere else in the country. We appreciate Professor Iwo Białynicki-Birula's role in this.

I would like to acknowledge generosity of the KBN (National Committee for Scientific Research) which provided financial support for the symposium and this special issue of *Acta Physica Polonica A*. I thank also my colleagues from the Centrum for their help in the organization of the symposium. Finally, special thanks are due to Dr. Jerzy Kamiński of Warsaw University for his help in editorial work on this issue.

Kazimierz Rzażewski