

## Preface

Without doubt the most significant advance in physics in our century is the genesis of the quantum theory. Its influence is by no means confined to physics and chemistry but involves fundamental questions of human knowledge itself. For this reason the historical background of the theory, quite aside from its physical and philosophical aspects, has been the object of early investigations. F. Hund, M. Jammer, M. J. Klein, and L. Rosenfeld have all published papers on this development. In recent years a large-scale project, "Sources for History of Quantum Physics" (see page 162) has secured a gigantic body of source material, above all letters of the scientists involved in the early stages of quantum physics, and has collected it in the form of microfilms.

The present work attempts for the first time to make extensive use of unpublished sources dating back to the first fifteen years of this development, from 1899 to 1913. In addition to the letters and manuscripts collected by the "Sources," a great deal of previously unknown material has been included. In this effort the manuscript collections of libraries and archives were widely consulted, as were particularly the scientific legacies of Johannes Stark and Arthur Erich Haas as well as the most essential portion of Arnold Sommerfeld's papers. It was the intention to conjure up as vivid as possible an image of the genesis of the quantum theory by drawing on pertinent publications and letters of the years 1899 to 1913, at the same time making cautious use of the inevitably somewhat distorted accounts from memory.

The present English edition contains all the references considered necessary for a scientific publication. On the other hand, the extensive literature survey that was originally published in the German version, a thesis for habilitation, has here been omitted since it is largely superfluous for the present purpose.

Thanks are expressed to the able translator, Mr. Claude W. Nash. It is hoped that this book will bring pleasure to the reader and gather new friends for the history of physics.

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