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# AUTOMATIC ACQUISITION AND REDUCTION OF NUCLEAR DATA

Proceedings of a Conference  
organized by  
European-American Nuclear Data Committee  
in Collaboration with  
Gesellschaft für Kernforschung m. b. H.  
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Edited by  
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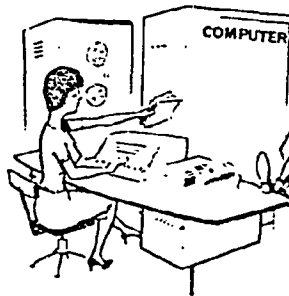


100 Channel  
Analyser



1960

Multi-thousand Channel  
Magnetic Tape Analyser



1964



Courtesy by Dr. Egelstaff and<sup>1</sup> Dr. Rae.

## Preface

A Conference on the Automatic Acquisition and Reduction of Nuclear Data was held at Kernforschungszentrum Karlsruhe on July 13-16, 1964. It was organized by the European-American Nuclear Data Committee in collaboration with the Gesellschaft für Kernforschung m.b.H., Karlsruhe. The main purpose of the conference was the discussion and dissemination of the rapidly growing amount of information in the new field of "on-line computers" in nuclear physics experiments. In particular, experience gained with such systems since a similar conference held at Grossinger, N. Y., in 1962 was discussed. The emphasis was on applications in low energy nuclear physics; however, an informative lecture on data processing problems in high energy physics was given.

This volume contains all papers presented at this conference and in addition two papers which were submitted, but not orally presented. Included are also the discussions following each paper, the opening and welcoming addresses, and a conference summary by W.W. Havens. A great effort was made to have the finished book available about four months after the conference. In order to avoid any delay in publication, it was not possible for the authors to have the proofs corrected themselves, nor has it been possible for all contributors to the discussion to check their remarks. It was felt, however, that this drawback would be outweighed by the advantage of receiving a complete record of the conference within a reasonably short time. For errors which were introduced in this way, the editors take the sole responsibility.

This publication represents the joint effort of many people. Thanks are due to the scientific secretaries of the various sessions for their help in collecting and editing the material, especially the discussions. W. W. Havens, F.H. Wells, A.C.L. Barnard, and H. Davis have kindly checked a large part of the proceedings from the point of view of the English language. The technical assistance of Mrs. D. Jenet and Miss H. Seeber in preparing the manuscript for publication has been invaluable. Finally, we would like to thank the reproduction department of Kernforschungszentrum Karlsruhe under K. Sorg for their excellent work.

Karlsruhe, September 1964

The Editors

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