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A large-scale workshop was convened at Los Alamos National Laboratory on August 17-21, 1987 to begin this program. Distinguished speakers from a wide range of institutions gave invited talks, some to provide a status report on present understandings, some to point out either general or particular advantages waiting to be gathered, and some to demonstrate the potential of experimental tools that may be used. The audience of nearly 200 was greater than anticipated, necessitating an overflow room with a video connection. An active and challenging discussion followed every speaker. A warm and positive atmosphere was evident in all respects.

Contributed papers were invited, and all abstracts are available at Los Alamos National Laboratory Preprint LA-UR-87-2119. It proved possible to allow the presentation of about half of these as indicated on the cover page for the morning and afternoon sessions. One afternoon was devoted to the development of specific plans for new experimental equipment. New proposals to laboratories and the funding agencies are anticipated from these efforts. With the exception of the talk by H. T. Fortson on nuclear structure aspects of pion-double-charge exchange, the volume contains the talks provided by the invited speakers.

Two days of the week before this workshop were devoted to workshops on related topics. The "Workshop on  $\pi, \eta$ , or Physics" and the "Second International Workshop on Pion-Nucleon Scattering Workshop." A principal theme of these previous was for higher energy pion beams, in order to do inelastic study of higher mass baryons and meson excitations. The value of such probes for pion-nucleon physics was often emphasized in the subjects presented here.

This meeting would not have been possible without the sincere efforts of many people. Members of the Advisory Committee were most free with their advice, opinions, and time. The cast of speakers that resulted was both appropriate to the theme and of high quality. Session chairs, a word for each chapter, provided more leadership than is common for such large meetings; all their forecasts and good styles are very much appreciated. Financial support for this workshop was provided by the Director of LAMPF, Dr. G. T. Garvey; by the Director of Los Alamos National Laboratory, Dr. Siegfried Hecker; by the Dean of the Graduate School of the University of Colorado, Professor Robert Slevay; and by the Chairman of the Physics Department of the University of Colorado, Professor Neil Ashby. We are grateful for their support. And of course, we all know that the real work was done by the LAMPF Liaison Office, most particularly by Robert Meriwether. Her able assistance at every stage is deeply appreciated.