PREFACE

The Eighth Hawaii Topical Conference in Particle Physics was held on the Manoa campus of the University of Hawaii during the two-week period August 8-21, 1979, with support from the University of Hawaii, the Department of Energy (High Energy Physics Program), and the National Science Foundation. This latest in a series of biennial conferences, started in 1965, was again directed primarily at providing an intensive review of the current status of a few major topics in particle physics. The major topics chosen for 1979 were (a) high-energy neutrino physics, (b) electron-positron collisions, (c) quantum chromodynamics, and (d) quantum flavordynamics. The attendees were 58 experimentalists and theorists, who were selected primarily from DOE- and NSF-supported groups as being the representative of the younger members of the active research community. Four Principal Lecturers provided the major presentation on experimental and theoretical topics. In addition there were frequent contributed seminar talks. Thus the general atmosphere was that of a "summer institute."

The four Principal Lecturers and their topics were:

Dr. Gunter Flügge (DESY): Perturbative Quantum Chromodynamics

Prof. H. David Politzer (CalTech): Perturbative Quantum Chromodynamics

Prof. Jun J. Sakurai (UCLA): Phenomenology of Quantum Flavordynamics

Dr. Jack Steinberger (CERN): Experimental Aspects of Neutrino Physics

Each Lecturer presented a series of five 75-minute morning lectures in the course of two weeks. We are especially grateful to our Lecturers not only for their expertise and clear presentation but also for their active participation in the discussions and the contributed sessions.

The afternoon sessions featured discussion periods and selected contributed papers relevant to the main topics. Summaries of these papers are published separately as a University of Hawaii High Energy Physics Group report, UH-511-360-79, edited by Dr. Michael D. Jones and Mr. Anggraita Pramudita. Copies are available free of charge by contacting the Group Secretary (High Energy Physics Group, University of Hawaii, Honolulu, HI 96822.

We wish to acknowledge the vital interest and support of several members of the University administration: Acting Chancellor Howard McKaughan, who provided basic University funding; Vice-President for Academic Affairs Durward Long, who extended

welcome to participants and also provided a concise summary of University science programs; and President and Mrs. Fujio Matsuda, who opened their home to the participants in an "aloha" reception. We again attribute the efficient handling of conference arrangements to the competence of our Group and Conference Secretary, Mrs. Caroline Chong, whose patience, good nature, and resourcefulness were appreciated by all the participants. Special thanks are due to our travel agent and volunteer hula instructor, Marvie Kelly, who trained our Lecturers during the Closing Lei Ceremony.

Vincent Z. Peterson
Conference Director

March 3, 1980