

# CLOSING REMARKS

JUDD: At this point in the program I take it upon myself to gratuitously volunteer to speak for the delegates here at this Conference, for a moment. I have not been authorized to do this by anyone, but a number of people have spoken to me, and I think what I am about to say will meet with general agreement.

First of all, we want to thank the International Union of Pure and Applied Physics, the United States Atomic Energy Commission, and the Oak Ridge National Laboratory, for sponsoring the Conference, then, we all want to thank all of those members of the Oak Ridge National Laboratory staff who worked so hard, both before and during the Conference, to make it successful for us, pleasant, enjoyable, efficient--and some of whom will continue to work for some time after we leave to clean up the remaining details!

I have attended enough of these meetings to feel, and I have heard many people comment, that this has been one of the best organized, the best prepared for, and best planned and scheduled conferences of its type. I think all of us want to compliment the quality of the arrangements for the conference, the facilities, the entertainment which was provided for us, and the format and arrangement of the sessions. I think that in large part the excellence of these arrangements is due to the Chairman of the Organizing Committee, and our host here, Dr. Livingston.

LIVINGSTON: Thank you very much Dave. I have a few disconnected items which I thought might be of interest to the delegates.

First, I want to reiterate what Dave said, and particularly thank the United States Atomic Energy Commission for their generous underwriting of a very substantial portion of the publication costs of the proceedings, which are quite substantial.

At the 1963 Cyclotron Conference at CERN, Pierre Lapostolle was the Chairman. I will read a telegram which he sent to this Conference:

REGRET UNABLE TO ATTEND THE INTERNATIONAL CONFERENCE ON ISOCHRONOUS CYCLOTRONS. PLEASE ACCEPT FOR YOURSELF AND CONVEY TO ALL THE CONFERENCE PARTICIPANTS MY BEST WISHES FOR A VERY SUCCESSFUL CONFERENCE. KIND REGARDS.

PIERRE LAPOSTOLLE

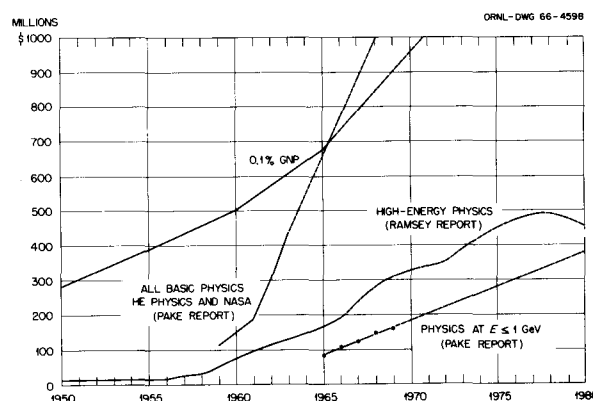
The next item is an extremely brief report on a meeting which the Organizing Committee held this morning. It is in the form of a recommendation with respect to the next conference which might be held in this general technical territory. The Organizing Committee was more or less unanimous in hoping that this next Conference would occur in about 1969, and that it would occur somewhere in Europe.

I have a few statistics of the Conference which you may find interesting. A total of 15 countries were represented. The number of participating organizations from abroad was 40, from the United States was 46. The number of registered participants totaled 229, including 73 from abroad and 156 from the United States. Some of the latter are actually visiting scientists from abroad.

I might add, parenthetically, that in the Ladies' Program 22 wives made six trips to craft factories and scenic points, and encountered at least one bear!

Now, I want to spend only about one minute to put in perspective, at least for the delegates from the United States, the matter of the funds which might be available in future years to build new machines. As mentioned earlier in this Conference, there is a committee of the National Academy of Sciences of the United States, called the Pake Committee, which has deliberated on this subject of the proper levels of support of scientific effort, and has made some recommendations for the next few years.

I took the liberty of summarizing some of this information on a slide. Perhaps you will find it interesting to examine the general support levels that such responsible scientific groups are thinking about. This is all related to something called the gross national product (GNP), which is a well known guide in this country, but may be very confusing to other people. The GNP is the index with which we automatically compare everything else. The full GNP is such a big number that it is kind of meaningless, so instead I chose to plot 0.1% of GNP, and related all my other numbers to that, on the same scale.



This scale is in millions of dollars, a thousand million full scale. First is 0.1% of the reported gross national product of the United States in 1950, 1955, 1960, and 1965. We have used 1964-65 and 66 for the extrapolation.

A similar slide made up a year or so ago extrapolated at a somewhat slower rate. No one really knows what is going to happen, but the GNP is offered as the reference.

The next curve is based on the recommendations of the Pake Committee; the solid part is what actually happened. These expenditures are for all basic physics, including high-energy physics and the basic portion of the Space program. The recommended support for all basic physics has just crossed the 0.1% GNP line.

Next, from the Ramsey Panel Report of a year ago, we have a record of the high-energy physics expenditures since 1950, and their proposed projection through 1975, to 1980.

Last, the Pake Report introduces the new area that we have been talking about at this Conference,

physics below 1 GeV. Their recommendation is that the support level, now about \$90,000,000, should go upward by a factor of about 2.5 in the next five years. This is the amount of money which might be available, some portion of it, for new machines. It looks as if some new machines might be built, but not nearly all the good new machines that might be conceived.

In closing, I thank all of the invited speakers and those contributing papers; the Chairmen of the sessions; my staff members who really worked very, very hard; and the many others who worked to make the Conference a success. Thank you very much. The Conference is closed.