



E 33 030

STUDY

THE INSTITUTE FOR ADVANCED STUDY
OFFICE OF THE DIRECTOR
PRINCETON, NEW JERSEY

November 16, 1949

Dear Professor Yukawa:

Mr. Kakutaro Inoue (50 Overlook Terrace, New York) of the Asahi Shimbun Press is preparing an article for the January issue of Asahi Science. He asked for a statement from Dr. Oppenheimer; and we have sent Mr. Inoue the attached statement. We are sending you a copy for your information.

Best regards,

Ray Sudduth

Professor Hideki Yukawa
Department of Physics
Columbia University
New York 27, N. Y.

November 16, 1949

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the key to understanding. It has been true of the great program of electro
nuclear accelerators which almost without exception have been designed
around the physical principles first enunciated by Yukawa.

At the present time, the very novelty of the elements introduced by Yukawa into physics constitutes a great challenge to theoretical description; and it is clear that, as was the case of the discovery of relativity and of the quantum of action, full maturing of his discovery will bring with it new mathematical developments and new conceptual changes for which we are not yet in any detail prepared. The great work which Dr. Yukawa has encouraged and fostered in Japan among theoretical physicists makes it appropriate to hope that just in these developments he and his colleagues will make further decisive contributions.

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Statement by Robert Oppenheimer
on the award of the Nobel Prize
to Dr. Hideki Yukawa

The Award of the 1949 Nobel Prize in Physics to Dr. Hideki Yukawa has brought universal rejoicing to his colleagues in all countries and in almost all branches of fundamental physics. We all recognize a debt to Yukawa for one of the great fructifying ideas which has determined the course of our science.

Until Yukawa's proposal of the meson, the great developments in atomic physics were all derivative from the discovery of the role of the finite velocity of light in Einstein's theory of relativity, and the gradual understanding of the consequences of the existence of the quantum of action. These two great findings, with their far reaching conceptual effects on the classical structure of physics, were supplemented in a radical way when Yukawa introduced a new notion, not present in classical physics, of a new kind of force and a new kind of structure underlying the physical world. His initial intuitions have in many ways been brilliantly confirmed by experiment. Far more important, they have provided the guide for the overwhelming majority of basic researches of an experimental nature. This is true in the interpretation of the wonderfully complex phenomenon of cosmic rays, where ideas going back to Yukawa have time and again proved the key to understanding. It has been true of the great program of electro nuclear accelerators which almost without exception have been designed around the physical principles first enunciated by Yukawa.

At the present time, the very novelty of the elements introduced by Yukawa into physics constitutes a great challenge to theoretical description; and it is clear that, as was the case of the discovery of relativity and of the quantum of action, full maturing of his discovery will bring with it new mathematical developments and new conceptual changes for which we are not yet in any detail prepared. The great work which Dr. Yukawa has encouraged and fostered in Japan among theoretical physicists makes it appropriate to hope that just in these developments he and his colleagues will make further decisive contributions.