

Department of Physics,
Osaka Imperial University,
Osaka, Japan,
March 15, 1939.

Dear Prof. Beck,

I received your letter with great pleasure, recollecting your visit to our country. Do you remember that you accepted on that occasion the reprint of my first paper on the theory of the mesotron and enlightened us on the problem of β -decay etc. I must beg your pardon for my delay in answering to your letter.

Your opinion that the neutron-proton force and the proton-proton force are always of the same order of magnitude on account of the importance of the higher order interactions seems to be quite plausible, if we accept the present formulation of the field theory. The problem of convergency, however, will be solved in a satisfactory manner, only when a theory is constructed, which is free from divergence difficulties. I hope that the β \neq unexpected phenomena such as the rupture of uranium nuclei will serve as the stimulus to the reconsideration of the ultimate structure of matter as well as the revision of the present quantum mechanics. I remain always

yours sincerely

Hideki Yukawa.

Beck (38 Dec 31) v. 18 77