PROPOSAL No. 208

Scientific Spokesman:

M. A. Markov Institute of High Energy Physics Academy of Sciences of the Kazakh SSR Alma-Ata 82, U.S.S.R.

A Proposal to Study Proton-Proton Interactions at the Energy of 300 GeV or Higher at the NAL Bubble Chamber

M. A. Markov Director of the Institute of High Energy Physics of the Academy of Sciences of the Kazakh SSR

> J. S. Takibaev Academician of the Academy of Sciences of the Kazakh SSR



АКАДЕМИЯ НАУК

СОЮЗА **COBETCKUX** СОЦИАЛИСТИЧЕСКИХ РЕСПУБЛИК

ОТДЕЛЕНИЕ ЯДЕРНОЙ ФИЗИКИ

» Go cesto

Москва, В-71 Ленинский просп., 14 Тел. 234-22-86

Illinois National Accel. Lab. P.O. Box 500, Batavia, Il-60510, USA

Dear prof.R.P.Wilson,

The Academy of Sciences of the Kazakh SSR carries out extensive investigations of hadron-hadron interactions at accelerator energies and also at high energies in cosmic rays. The Institute of High Energy Physics of the Academy has quite a number of special-purpose equipment and computers. Nowdays the Institute takes part in investigations of nuclear emulsions, radiated on your accelerator in the September of the last year.

The Institute has a few semiautomatic devices to measure bubble chamber's films and mathematical programmes to process data. The investigations have been performed on proton-proton collisions in the 81 cm Sacley Hydrogen bubble chamber and in the 200 cm CERN HBC at the energies of 10 and 19 Gev. Now is developed the method for the analysis of films of HBC "Mirabelle", radiated by the protons at energies of 50-70 Gev.

In order to study proton-proton interactions at higher energies we would like to get bubble chamber's films, radiated on your accelerator by protons at the energy of 300 Gev or higher. We would like to receive about 75000 pictures and agree to all requirements, connected with this work.

Yours sincerely

Marken

Academician-secretary of the Academy of Sciences of the USSR

M.A.Markov

Director of the Institute of High Energy Physics of the Academy of Sciences of the Kazakh SSR

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