

CERN LIBRARIES, GENEVA



CERN/TC/COM 65-48
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CM-P00074051

Firm proposal for high energy proton

exposure in the CERN 2m HBC

Cambridge University

Introduction

Following the successful 10 GeV/c proton experiment in the HBC 81 and BNHBC 152 which it is expected will be completed by the end of the year, the Cambridge group wishes to bring forward its earlier proposal (CERN/TC/COM 64-70) for a 15 GeV/c proton experiment.

Experiment

An exposure of 100,000 pictures of 15 GeV/c protons in the CERN 2m chamber is requested. This could be done parasitically, and a date near the end of the year would be welcomed.

Physics

We intend to measure 4-prong and 6-prong events. Considerable experience of the analysis of 4-prong events has been gained from the 10 GeV/c experiment, and the proportion of completely fitted events ($\sim 30\%$) lends encouragement to the view that this state of affairs may persist to a reasonable degree at 15 GeV/c.

Two IEP-type measuring machines will be available for the experiment.