



Atomic Energy
of Canada Limited
Research Company
Chalk River
Nuclear Laboratories

L'Énergie Atomique
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1984 July 19

LM4
cc: PK/KS
E. Dixon
R. Wheeler
7/30/84

Dr. Taiji Yamanouchi
Program Planning Office
Fermilab, M.S. 105
Batavia, Illinois 60510
U.S.A.

Dear Taiji,

I am writing to let you know of our plans to submit a proposal to undertake further channeling studies at Fermilab. We plan to submit a proposal by October 1 which, we understand, allows sufficient time for the proposal to receive full evaluation and, hopefully, approval at the November meeting.

We plan to propose to do more channeling along the lines of the E660 experiment and the more recent tests in M-Bottom. The emphasis will be on the material and fabrication aspects of crystals used for channeling as well as some work on the basis of channeling.

To a large extent we plan to use the existing apparatus although we may want to add a scintillator hodoscope to the downstream drift chamber station to help to cope with the higher muon flux anticipated in M-Bottom. Until the fate of the proposal is resolved we would like to retain the present electronics. We feel we can release the PDP-11 for some months if it is needed for testing elsewhere but would want it back a month before running.

The group would consist of people from Chalk River, New Mexico, Albany and Fermilab with Chalk River taking the lead responsibility for the proposal.

We expect we will be asking for 400 to 500 hours of beam time split in several parts over the next running period. Since the equipment exists we can be ready to run early in the period. It is our belief that we can find ways to cope with the background from M-Center as well as the intensity limitations.

If you see any complications with what we are considering I would appreciate being informed.

Sincerely,

James S. Forster
Solid State Science Branch

JSF/ael

cc. W.M. Gibson - SUNY, Albany
J.A. Ellison - New Mexico
R.A. Carrigan - Fermilab