



CM-P00046179

PHIII-74/30
29 March 1974M E M O R A N D U M

To : Physics III Committee
From : A.-M. Habbestad, E. Hagebø et al.
Re : Proposals PHIII-74/14 and PHIII-74/21(I)

Though it may not be completely obvious, the experiments in these two proposals form part of the same project. For technical and administrative reasons we have chosen a separate presentation, although we, of course, intend to coordinate the two experiments as one. The technical reason is that the angular distribution cannot be studied in the same irradiations as the range distributions. Because of low intensities the range distributions must utilize bigger angular intervals than what is desirable and wanted for the angular distribution and the foil-stack mounting for ranges requires a substantial part of the available solid angle.

Chemical separation will be used in the determination of the activities in the thick catchers with which the angular distribution is to be measured. This will produce results on a wide range of nuclear species but is too complicated and time-consuming to be used in the case of the many thin foils used to determine the range distributions. For the latter, simple γ counting will be used to obtain information on a limited number of recoiling nuclides. The techniques being incompatible, we cannot combine the two parts of the experiment.

The total effective irradiation time we are asking for will be nine hours during 1974. (Note that the times given in the proposals included pumping times and were not effective irradiation times.)