

PROPOSAL FOR SERIES TARGETING--
THIN PARASITIC INTERMEDIATE TARGETS

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While talking last week to Glen Lambertson about EPB problems I had a thought regarding series targeting. As you know, Denis has shown how series targeting is efficient for using up all the protons. At the same time, however, the intermediate stations usually cannot be used as efficiently for beams. Because a large part of the cost of target stations goes into shielding, it is therefore not clear how much of a limited budget should go into the provision of series stations. This brings me to a proposal.

Let's provide series targeting in such a way that all the intermediate stations are for parasitic operation, i.e., the targets are thin enough so that no (or very little) increase in shielding is needed over the normal catastrophe protection. One would pay a little more for the transport system and perhaps some movable shielding.

This is not a new idea. But if the "spur line" philosophy is followed it has some new advantages. Formerly, we worried that setup of parasitic beams would interrupt the main beam line. With the "spur line" plan only one major backstop would be affected by work in any parasitic area.

The definition of such a special parasitic area is as follows:

1. Very thin targets (or low beam intensity).
2. No disruption of main beam line during operation.
3. Only very occasional rebuilding of beam lines always in a way consistent with scheduled off times of the associated major backstop.
4. A small commitment of equipment to the secondary parasitic beams (i.e., probably no separators and only a few magnets).
5. Short-term informal scheduling procedure.
6. No long-term setups.

Such areas would give many people a chance to get their feet wet; strong proponents of this plan have been Fitch, Cronin, and Tollestrup. My own feeling is that we should have at least one such area (especially since the injector experimental area will be eliminated), but that it should not take too much support from the main backstop use.