

Science Priority List

- E952 Do I need to say anything on the importance of this
- E813 Woosley said in public that this must be measured
- E922 has never been measured and very important for Al26 production
- Ca40(α,γ) To be proposed and important for Ti44 production; may need CSB or ECR on OLIS
- Na22(p, γ) Very important to be remeasured for Nova Na22 production; could do at Seattle (with RT) but better with DRAGON
- E989 There is unpublished data for Al26g reaction but need remeasurement
- E810 Important but tough
- E811 Given High priority by EEC and important for breakout
- E805 Direct Capture really needs to be measured to confirm ANC data for this very important breakout reaction
- E946 Important for hot CNO
- E983

Feasibility Priority List

- E989 (They believe they can get a factor of at least x5 for Al26g over what we had this summer)
- Na22(p, γ) Very doable if can get approved at DRAGON; making RT as beam exists and straightforward to take to Seattle
- Ca40(α,γ) Could get started since stable beam available; need 2+ for proper RFQ transmission
- E811 Could get lucky with either the FEBIAD or the ECR source
- E922 Maybe they will develop a fast Al releasing target; I suggest silicides given ORNL work.
- E805 N beam does not yet exist but could be if they used zeolite, ECR and 1 microamp of beam
- E946 F beam does not exist
- E952 Needs serious mods to DRAGON to do properly at the low energies
- E810 Mg does not yet exist but could be developed...tough experiment however
- E813 Really tough experiment at present unless we can get support to develop intense O beam
- E983 C beam does not yet exist but could if they use zeolite, ECR and 1 microamp of beam