## <sup>40</sup>Ca run Aug 18 - 21 - A short History

- Aug 18: Keerthi could produce 100nA of <sup>40</sup>Ca<sup>++</sup> from MW source we recieve beam of <sup>40</sup>Ca<sup>7+</sup> at 8 pm, we check beam contamination <sup>40</sup>Ar/<sup>40</sup>Ca ~ 0.1%, beam energy initially too high 1160 keV/u, CSB foil broke during beam centering
- Aug 19: Marco finished tuning but had troubles with unstable beam from MW source, Keerthi switched over to HySIS.

  Revieve beam at 5 pm, <sup>40</sup>Ar/<sup>40</sup>Ca < 0.03%, initial beam energy measurements were not consitent due to Q1 off, took recoil run a this energy at 4 Torr He
- Aug 20: a careful energy measurement at 13+ and 12+ gives 1156 keV/u, ask for lower energy, recieve beam at 11 am, measure 1138 keV/u, beam current is ~ 1 enA, take runs set for 44Ti13+, some debugging of electronics we installed 55 ug/cm² window in IC to improve separation, some runs with XslitF narrower scaling to other charge states needs adjustment of tune
- Aug 21: runs of <sup>44</sup>Ti with charge states 13+, 14+, 15+, 15+, 16+ (no 12+ measurement because ED1 deconditioned of to 165 kV), increased He pressure to 6 Torr, took run at 13+, 14+ Keerthi optimized OLIS, 4-8 enA at He target increased He pressure to 8 Torr, took run at 13+, CSB foil broke during pump out of gas target after replacement we took another run at 13+ at 0 Torr (CSB only) and 8 Torr, OLIS died during switch over to 14+



