

HIP-based Muon Alignment Timeline for CRAFT

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- ► Large structure pre-alignment: wheel and disk positions (6 dof) relative to tracker
- ▶ Alignment of 200 out of 250 DT chambers relative to tracker (fewer dof)
- Two-stage alignment of CSCs: overlaps procedure for chambers relative to rings, followed by ring alignment (similar to disk alignment)

Timeline

- Accomplished
 - \blacktriangleright Overlaps procedure in beam-halo data agrees with photogrammetry at 300 μ m level, no outliers (accuracy goal!)
- ► This week
 - ► Validate existing AlCaRecos
 - ▶ Maybe large structures, which are important for reconstruction
 - ► Not clear that large structure alignment would pass vetting process before start of November CRAFT
- ► Rest of the year
 - Whole program: involves many "firsts," does not need to be prompt yet