MAUS status

P. Franchini

MICE CM 50

1stst March 2018

Current release

- Current release: MAUS-v3.1.2
- Documentation:
  https://micewww.pp.rl.ac.uk/projects/maus/wiki
- Reconstructed data (with globals):
  http://reco.mice.rl.ac.uk
- Download: http://heplnv152.pp.rl.ac.uk/maus/

- Issue tracker for problems (installation, bugs, ...)

What has changed

- Previous major release MAUS-v3.0.0
- Tracker: (Chris H.)
  - pattern recognition:
    - Fixes for the 50 MeV/c bump
    - Refitter for low Pt mis-reconstruction
- Globals: (Chris R.)
  - Fully implemented in MAUS and in reconstruction
- First version of the cuts structure (Misha)
- Reconstruction ready for the GRID (Durga)

Pending issues

- Tracker
  - MINUIT mis-reconstruction at low Pt
- TOF
  - Source of the lower efficiency in TOF2 (several causes being investigated, release slab Dt cut)
  - Slab Dt offset in TOF2 (mostly outer slabs, calibration)
- Cuts structure v2
- Global track matching: quite demanding in term of computing resources

MICA analysis framework

- Adam Dobbs analysis package (in C++)
- Analysers already implemented
- Easy way to produce plots for new analysts
- Available on GitHub:

```
git clone https://github.com/ajdobbs/mica.git
```

- Future of it?

Conclusion

- First draft of the MAUS paper in progress
- Future release(s):
  - Track matching *(see Chris H. talk, later)*
  - TOF inefficiencies *(see Viktor talk, tomorrow)*
  - New cut data structure *(Ajit, in progress)*
  - Offline event viewer (*Mihailo*, already in the trunk)