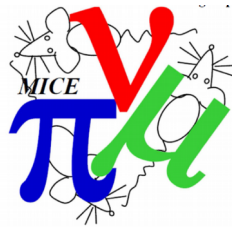


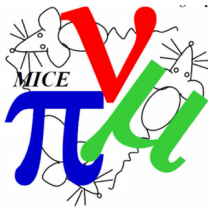
Using the Grid for analysis

P. Kyberd, D. Maletic, P. Franchini



MICE
VC 210
April, 18 2019

Current usage of the Grid



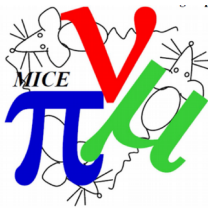
- **Reconstruction and MC**
 - Raw data at Imperial and RAL (and Brunel)
 - MAUS release available on CVMFS
 - Jobs running at RAL (for convenience)
 - Output stored at RAL PPD
 - Replica at IC
 - Tape?
- **Longstanding archive**

Analysis



- Private version of MAUS in users branches
- Jobs on laptops
- University clusters/SCARF for more resources
- In order to publish (*reproducible results*):
 - Official version of MAUS (private changes should make to a tagged release)
 - Official reconstruction and MC/hybrid MC
 - What about the analysis code?

Analysis on the Grid



- Initial overhead (https://micewww.pp.rl.ac.uk/projects/computing-software/wiki/Mice_grid)
 - Join the MICE VO
 - Obtain a certificate
 - Local resources/support to send jobs to the Grid
 - Learn how to use the Grid
- Game vs candle
 - Small analysis might prefer local resources
 - still, systematic studies require space and CPU
 - Larger datasets can saturate a local batch system (e.g. C. Hunt)

Promote the Grid



- An unique Grid analysis framework would not be possible
 - Write an how-to based on a real MAUS analysis
 - Support analysis already facing a resources bottleneck
 - Port a mature analysis code on the Grid?
 - Any volunteer?