Outline of the morning GlueX/Hall-D Talk

Purpose of These Talks

The talk is allocated a 40 to 45 minute long time slot in the morning. We will need to assume that some time is left for questions, so we will aim for 15 to 20 slides total. Curtis will give the first half of the talks, while Mark will give the second half of the talk. The purpose of this session is to familiarize the reviewers with what is going on in GlueX and then to get the numbers on the table, and then justify where those numbers came from.

Common Opening

(i) <u>Title slide</u> List collaborating institutions on this slide.   30s (30s)

(ii) <u>Outline slide</u> This slide will serve as an outline for both parts of the talk.   60s (90s)

GlueX Overview Talk by Curtis

1 <u>Physics Slide</u> outline what we want to measure in GlueX. What are gluonic excitations and why are we looking for them? What do we need to measure to be able to do this? Particle J^{PC}s, masses, widths and decay modes.   180s (270s)

2 <u>Physics Slide</u> Show how we use coherent bremsstrahlung beam with linearly polarized photons and the GlueX detector to search for hybrid mesons. What does a GlueX event look like?   120s (390s)

3 <u>Physics Slide</u> What does GlueX physics analysis look like? Describe amplitude analysis and what goes into it.   90s (480s)

4 <u>Management Slide</u> The management table for the collaboration show working groups and describe how things are carried out in GlueX/Hall-D.   90s (570s)

5 <u>Data/Analysis Flow Slide</u> This is the block diagram showing how data moves through the analysis. This is what we are going to be telling you about today. This also needs to introduce data volumes, etc....   180s (750s)

6 <u>Physics Slide</u> Show Jake's three-pion analysis and describe what went into it.   120s (870s)

7 <u>Tasks</u> What we need to be ready for an engineering run in 2015. List where we are, what is done, and what needs to be done.   90s (960s)

8 <u>Pass-off Slide</u> Introduce Mark Ito as the chair of the software working group. Perhaps with a blow-up of parts of the management plan emphasizing software.   10s (970s)

Software Overview Talk by Mark

1. <u>Data/Analysis Flow Slide</u> A variation on the above slide emphasizing what is done and what needs to be done.   120s (1090s)

2. <u>Manpower Estimates</u> A slide showing the broken out tasks with % complete, manpower needed to complete and names of people with institutions that are responsible for the tasks. Conclusion that at least at the present, we appear to have sufficient manpower to complete the tasks in the time given.   120s (1210s)

3. <u>Software Management</u> A slide showing how the Offline group is organized, and how it interacts with the other groups involved in related tasks.   60s (1270s)

4. <u>Data/Compute Model</u> A slide based on Mark's spread sheet showing the way that we estimate data volumes and CPU needs.   120s (1390s)

5. <u>Calibration/Alignment</u> What needs to be calibrated and how will it be done? What has been done already? pi0 calibration of the FCAL, CDC prototype alignment and calibration, others? Beam tests?   120s (1510s)

6. <u>Data Analysis Model</u> Lay out the model for analysis of GlueX data. Raw data on tape/disk at Jefferson Lab. DST's produced at Jefferson Lab, on Tape/Disk. MiniDSTs produced at Jefferson Lab and then both analyzed on site and moved off site utilizing grid-ftp.   120s (1630s)

7. <u>Simulation</u> Lay out the model for GlueX simulation. Production both at Jefferson Lab and at remote sites. Simulation will produce MiniDSTs that will need to be moved. All other data is likely flushed. What are the expecte resources in outside sites?   120s (1760s)

8. <u>Open Science Grid</u> Discuss that GlueX is a virtual organization in the OSG. Some resources from outside are committed to the grid.   120s (1890s)

9. <u>Amplitude Analysis</u> On GPUs   60s (1950s)

10. <u>Data Challenge</u> What sort of data challenge do we need? When?   60s (2000s)

11. <u>Summary/Conclusion</u> Summarize where we are and where we are going. List of what still needs to be done?   60s (2060s)

Total estimated time is $34.33\,m$, but I think that the guesses in Mark's section are not as accurate as the first section. Given a $45\,m$ time slot, this does leave sufficient time for questions. If we only get $40\,m$, then I think that we probably have to tighten things by about 2 slides.