12 GeV Software Review — Hall A Talk Outlines

Morning Session (DRAFT)

Purpose: Orientation of the reviewers. Presentation of specific numbers for resource requirements. 30-minute time slot.

(i)	Title	10s (10s)
(ii)	Hall A Collaboration (list of institutions)	10s (20s)
(iii)	Outline	30s (50s)
1	Physics Topics in Hall A	120s (170s)
2	Timeline of Experiments 2013–2015 (tentative)	120s (290s)
3	Experimental Layout with HRSs/base equipment	60s (350s)
4	Experimental Layout with SBS	60s (410s)
5	Collaboration Management (groups, leaders and responsibilities)	90s (500s)
6	Data Acquisition Brief	90s (590s)
7	Raw data volumes expected from experiments	60s (650s)
8	Data/Analysis flow diagram/overview (raw data on disks, tape, farm, DSTs, DST analysis, offsite activities)	120s (770s)
9	Hall A (and C) analysis software (C++ analyzer, ROOT, PAN)	120s (890s)
10	Calibration tasks, procedures, software	60s (950s)
11	Simulations, existing software, current activities, plans	60s (1010s)
12	Software tasks, open issues, milestones, assuming 2013 commissioning startup and 2015 SBS startup (include DAQ/firmware in this??)	120s (1130s)
13	Software Management & Manpower	90s (1220s)
14	Estimation of computing requirements (method, assumptions)	90s (1310s)
15	Summary of computing requirements (table)	90s (1400s)
16	Collaboration, communication, user education efforts (meetings, analysis workshops, web resources)	90s (1490s)
17	Summary/Conclusions	60s (1550s)

Total time 25m50s.

Afternoon Session (DRAFT)

Purpose: Discussion of technical details. 2 hour session joint with Hall C. Prepare ≈ 45 minutes worth of slides, not necessarily expected to be given in order.

1	Outline	60s (60s)
2	Data/Analysis Flow recap	60s (120s)
3	C++ Analyzer architecture I (ROOT, plug-ins)	120s (240s)
4	C++ Analyzer architecture II (physics modules)	120s (360s)
5	C++ Analyzer performance	120s (480s)
6	C++ Analyzer parallelization	120s (600s)
7	C++ Analyzer database	120s (720s)
8	Decoding blocked data from pipelined front-ends	120s (840s)
9	DST format, output definition	120s (960s)
10	HRS/VDC tracking algorithm (discuss APEX high-rate challenge)	120s (1080s)
11	SBS tracking I	120s (1200s)
12	SBS tracking II	120s(1320s)
13	SBS calorimeter analysis	120s (1440s)
14	HRS Optics "optimization": procedure & tools	120s (1560s)
15	SBS alignment, calibration	60s (1620s)
16	General calibration tools (need user input!)	60s (1680s)
17	Optics-based simulations (SIMA/SIMC/MCEEP)	120s (1800s)
18	Particle transport-based simulations (GEMC)	120s (1920s)
19	"OnlineGUI" online histogramming	60s (1980s)
20	Single-event display software	120s (2100s)
21	Code management, revision control system, build system	60s (2160s)
22	Documentation (web resources)	60s (2220s)
23	Areas of concern, weaknesses, risks	180s (2400s)

Total time 40m0s.

Should have an SBS collaborator available to reply to specific SBS questions.