

DOE Recommendations for Accelerator Physics



- None
- ...but a few comments:
 - No specification for beam pulse flatness...since local intensity affects matching, lack of flatness can result in large projected emittance growth
 - Dong-o investigating...need input from LLRF
 - The parameter list specifies “expected” rms emittances. Since small halo can drastically change rms emittance...this is not always a useful specification
 - We agree that it is important to pay attention to the distribution, both core and tails
 - The commissioning team should use the opportunity afforded by DTL delay to fully characterize the beam from MEBT
 - We commissioned within constraints of hardware and time
 - ...use all possible means to reduce electron generation in SNS ring...proposed clearing electrode and solenoids should go ahead...
 - Included in baseline now

DOE Review (full draft agenda out this week)



- AP Overview – **S. Henderson**
- Joint Session
 - Front-End Readiness and Operations – **G. Dodson** 25
 - Front-End Beam Commissioning Results – **A. Aleksandrov** 40
 - Front-End Beam Diagnostics Experience – **S. Assadi** 25
 - Ion Source Performance and Plans – **M. Stockli** 25
 - DTL Commissioning Preparations – **E. Tanke** 25
- AP Breakout Session
 - Aspects of Piezoelectric Compensation of Lorentz Force Detuning
M. Doleans 25
 - Ring Physics Overview – **D. Raparia** 30
 - Understanding Space Charge and Controlling Beam Loss in the PSR
S. Cousineau 25
 - ORBIT Code Plans and Update – **J. Holmes** 25
 - Applications Programming Progress – **J. Galambos** 30



DOE Timeline

- Tues April 8 – Today
- Tues April 15 – No video
- Tues April 22 - Next AP Video; Parameter List finalized
- Wed April 23 – Sign-off on Parameter List
- Tues April 29 - DOE Dry run for AP
- Thurs May 1 Noon – Breakout Session Powerpoint files on Server
- Tues-Thurs May 6-8 – DOE Review