



International Scoping Study Accelerator Working Group: Report Tasks

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NuFact06-Irvine
August 27, 2006



Accelerator WG Organization



- Accelerator study program managed by “Machine Council”
 - R. Fernow, R. Garoby, Y. Mori, R. Palmer, C. Prior, M. Zisman
- Aided by Task Coordinators
 - Proton Driver: R. Garoby, H. Kirk, Y. Mori, C. Prior
 - Target/Capture: J. Lettry, K. McDonald
 - Phase Rotation/Bunching/Cooling: R. Fernow
 - Acceleration: S. Berg, Y. Mori, C. Prior
 - Storage Ring: C. Johnstone, G. Rees



Proposed Assignments (1)



- Overall editor: **Zisman**
- Introduction [2 pages] (**Zisman**)
 - **Zisman**
 - organization of study; outline of report
- Proton Driver [8 pages] (**Prior**)
 - **Garoby**
 - linac-based designs; Superbeam needs and issues
 - **Prior, Mori**
 - ring-based designs (synchrotrons, FFAGs)
 - **Kirk, Mori**
 - R&D issues

Proposed Assignments (2)

- Target [5 pages] (**McDonald**)

- **McDonald**

- liquid-metal target scenario; R&D needs

- **Bennett, Simos**

- solid target limitations; R&D needs

- **Kirk**

- bunch-length effects; target material comparison

- Front End [15 pages] (**Fernow**)

- **Fernow**

- baseline description and rationale; use of both signs; non-ideal performance; cooling vs. acceleration aperture trade-offs; description of ICOOL (“tools”)

- **Palmer**

- comparison of technologies



Proposed Assignments (3)



- **Acceleration [15 pages] (Berg)**
 - **Berg**
 - FFAG issues and aperture limitations; baseline description and rationale; R&D needs
 - **Bogacz**
 - linac and RLA designs and optics; two-sign issues; transport between systems and layout
 - **Mori**
 - description of harmonic jump concept
 - **Machida**
 - tracking with errors

Proposed Assignments (4)

- Decay Ring [10 pages] (**Rees**)

- **Rees**

- triangle ring design; bunch-number issues; two sign issues; R&D needs

- **Johnstone**

- racetrack ring design; two sign issues; R&D needs

- **Méot**

- tracking with errors

- R&D List and Summary [5 pages] (**Zisman**)

- **Zisman**

- assemble R&D list; include cost estimates



Schedule



- **First draft due to MZ:**
 - September 25, 2006
- **Edited draft**
 - October 5, 2006
- **Draft to Program committee**
 - October 15, 2006



Guidelines



- **It is easier to cut text than to add**
 - **err on the side of providing adequate detail**
 - also figures and tables to summarize results