



# International Scoping Study Accelerator Working Group: Report Tasks

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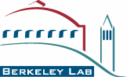
NuFact06-Irvine August 27, 2006



## Accelerator WG Organization



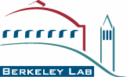
- · Accelerator study program managed by "Machine Council"
  - R. Fernow, R. Garoby, Y. Mori, R. Palmer, C. Prior, M. Zisman
- · Aided by Task Coordinators
  - Proton Driver: R. Garoby, H. Kirk, Y. Mori, C. Prior
  - Target/Capture: J. Lettry, K. McDonald
  - Phase Rotation/Bunching/Cooling: R. Fernow
  - 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
    - olinac-based designs; Superbeam needs and issues
  - Prior, Mori
    - oring-based designs (synchrotrons, FFAGs)
  - Kirk, Mori
    - R&D issues



## Proposed Assignments (2)



#### Target [5 pages] (McDonald)

- McDonald
  - oliquid-metal target scenario; R&D needs
- Bennett, Simos
  - o solid target limitations; R&D needs
- Kirk
  - obunch-length effects; target material comparison

#### Front End [15 pages] (Fernow)

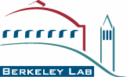
- Fernow
  - baseline description and rationale; use of both signs; nonideal performance; cooling vs. acceleration aperture tradeoffs; description of ICOOL ("tools")
- Palmer
  - ocomparison of technologies



## 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
    - odescription of harmonic jump concept
  - Machida
    - otracking with errors



## Proposed Assignments (4)



- Decay Ring [10 pages] (Rees)
  - Rees
    - triangle ring design; bunch-number issues; two sign issues;
       R&D needs
  - Johnstone
    - oracetrack ring design; two sign issues; R&D needs
  - Méot
    - otracking with errors
- · R&D List and Summary [5 pages] (Zisman)
  - Zisman
    - o 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