Muon Accelerator Program
D&S Monthly Status Update

Robert Ryne
LBNL

July 31, 2015

Outline

- Brief Updates
- Neutrinos from a pion beamline (nuPIL) – A. Liu
- Update on concepts for final muon cooling – T. Hart and D. Neuffer

L2 MANAGER STATUS REPORTS: DESIGN & SIMULATION

Monthly L2 Status Report – WBS: 02.03 – Cooling

31 July 2015
Pavel Snopok

Milestone Status (Progress)

Resource Conflicts, Plan Changes and Issues

Late Items

Summary of Previous Month

- Activities concentrate around final cooling options:
  - Dave Neuffer and Terry Hart study alternative schemes to get to the (25,25,72000) μm point (for details, see latest bright muon sources meeting: https://goo.gl/nrtpLz)
- Bright muon sources parallel session arranged at NuFact'15:
  - Intro talk covering HCC as well (Pavel, need input from Katsuya)
  - Hybrid cooling channel (Diktys)
  - Final cooling (Mark, based on input from Hisham, Dave, Terry)

Upcoming Work (Next Month)

- NuFact'15 and COOL'15
- JINST paper preparation

Quarterly Plans

- JINST papers

Monthly L2 Status Report – WBS: 02.07 – Decay Rings

31 July 2015
Alex Bogacz

Milestone Status (Progress)

- **Assigned work on JINST articles:**
  - 'Decay Ring Design for Long Baseline NF a la NuMAX" - J. Pasternak and D. Kelliher
  - 'Decay Ring Options for Short Baseline NF a la NuSTORM'
    - Design and Beam Dynamics of the RFFAG - J-B. Lagrange
    - Design and Beam Dynamics of the FODO Ring - A. Liu

Resource Conflicts, Plan Changes and Issues

Late Items

Summary of Previous Month

- **Monitoring progress on JINST articles:**
  - J. Pasternak: on track, will present a talk at NuFact'15
  - J-B. Lagrange: on track, will present a talk at NuFact'15

Quarterly Plans

- **Finalize JINST articles**
  - End of September, 2015 - submission target date
  - Initial peer review
  - Final editing
- **Submission of JINST articles to the Editorial Board**

Upcoming Work (Next Month)

- **Continue work on JINST articles**

Monthly L2 Status Report – 31 July 2015
WBS: 02.05 – Collider Rings Yuri Alexahin

- Progress on MC lattice:
  - Dynamic aperture w/ 3-sextupole correction scheme can be improved by adding decapole component to unpaired sextupole for vertical chromaticity correction
    - 1.5 TeV beta*=1cm lattice increased to 6 sigma
    - 3 TeV beta*=5mm lattice increased to 6.6 sigma

AOB

- Issues?
- Questions?
- Comments?