Abstract (M. Palmer)

**Overview**

1. *“The Potential of Muon Accelerator Capabilities,”* M. Palmer, K. Long, et al.
2. *”The U.S. Muon Accelerator Program,”* M. Palmer, et al.
3. *“The Muon Ionization Cooling Experiment (MICE),”* K. Long, et al.
4. *“The International Design Study for a Neutrino Factory,”* P. Soler, K. Long, et al.

**Particle Physics Muon Accelerator Applications**

1. *“The nuSTORM Short Baseline NF Concept,”* A Bross, et al.
2. *“The IDS-NF Reference Design Report,”* IDS-NF Team
3. *“The NuMAX Long Baseline Neutrino Factory Concept,” J.-P. Delahaye et al.*
4. *“Muon Collider Capabilities,”* R. Ryne, M. Palmer, J.-P. Delahaye, R. Palmer,  MASS Team
5. *“Cooled Muon Beams for Low-Energy Experiments,”* C. M. Ankebrandt et al.

**Current Muon Accelerator System Concepts**

1. “*Proton Driver Options,”* K. Gollwitzer, C. Ankenbrandt, et al.

Individual topical contributions:

1. ?
2. ?

2. *“Target System Options,”* H. Kirk, K. McDonald, et al.

Individual topical contributions (names below are lead author):

1. Magnet Coil Conceptual Design, B Weggel
2. Target System-Phase Rotator Joint System Optimization, H Sayed
3. Target Parameter Optimization,  X Ding
4. Mercury Handling System, V Graves
5. Energy Deposition Computations, N Souchlas

3. *“Front End Design Concepts,”* D. Stratakis, D. Neuffer, et al.

Individual topical contributions:

1. Front End for a Neutrino Factory or Muon Collider, D. Neuffer, P. Snopok, Y. Alexahin
2. Front-end channel with gas filled cavities, Neuffer, Stratakis
3. Particle section system & Energy Deposition study for the front-end, Snopok
4. ?
5. ?

4. *“Muon Cooling,”* P. Snopok, D. Stratakis, K. Yonehara, T. Roberts, et al.

Individual topical contributions:

1. Criteria for Evaluating the Performance of Ionization Cooling Channels (D. Neuffer)
2. Initial cooling (vacuum and hybrid FOFO snake), Y. Alexahin
3. Vacuum RF and hybrid six-dimensional cooling, D. Stratakis
4. Study of Helical Cooling Channels for Bright Muon Sources, K. Yonehara et al.
5. Charge separation for 6D cooling, C. Yoshikawa
6. Bunch merging for the VCC, Y. Bao
7. Final Cooling for a High Energy High-Luminosity Lepton Collider, D. Neuffer, H. Sayed, T. Hart, D. Summers

5. *“Fast Acceleration Systems,”* J.S. Berg, A. Bogacz, D. Hartill, et al.

Individual topical contributions:

1. Muon Acceleration Concepts for NuMAX: ‘Dual-use’ Linac and ‘Dogbone’ RLA, S. A. Bogacz

6. *“NF Storage Ring Concepts,”* (Short Baseline NF, Long Baseline NF), A. Bogacz, J. Pasternak, et al.

Individual topical contributions:

1. Short Baseline: Design and Beam Dynamics of the RFFAG, J.-B. Lagrange
2. Short Baseline: Design and Beam Dynamics of the FODO Ring, A. Liu
3. Long Baseline: Decay Ring Design for Long Baseline NF, J. Pasternak and D. Kelliher

*7. “Collider Concepts and the Machine-Detector Interface,”* Y. Alexahin, N.

Mokhov, T. Markewiecz, et al.

Individual topical contributions:

1. Lattice Challenges and Solutions: Higgs Factory, Y. Alexahin
2. Lattice Challenges and Solutions: High-Energy Colliders, Y. Alexahin
3. MDI: Mitigating Impact on Superconducting Magnets, N. Mokhov
4. MDI: Reducing Background Loads on Detector, N. Mokhov
5. MDI: Detector Background Rejection Techniques, N. Mokhov

*8. “Neutrino Beam Line Concepts,”* D. Adey, et al.

Individual topical contributions:

1. ?
2. ?

**MICE**

Series of technical and data analysis articles

**IDS-NF**

Reference Design Report (multiple articles/sections?)