Muon Collider R&D Co-ordination









• Steve Holmes has asked, on behalf of MCOG, that a NFMCC & MCTF coordinating committee be formed to coordinate the NFMCC & MCTF Muon Collider activities, & ensure the overall R&D is coherent & effective.

Steve Holmes, March 13th, 2007:

"... MCOG ask the NFMCC and MCTF to form a Coordinating Committee composed of the management of each organization. This would include Geer, Shiltsev, Bross, Kirk, and Zisman. I would like to suggest doing this immediately, i.e. before the MUTAC meeting. The general charge would be to provide effective coordination that maximizes the integrated effort. ... "

• The Muon Collider Coordinating Committee (MCCC) had its first meeting March 19th, and second meeting April 3rd. This talk summarizes the MCCC discussions/agreements/plans from these two meetings.





PURPOSE:

To co-ordinate the NFMCC and MCTF proposed and ongoing R&D activities to maximize their joint effectiveness and facilitate cross-participation in these activities where it makes sense.

MEMBERS:

Alan Bross: NFMCC co-spokesperson, MCTF Steering Group Member Steve Geer: MCTF co-leader, NFMCC Exec. Board Member Harold Kirk: NFMCC co-spokesperson Vladimir Shiltsev: MCTF co-leader Mike Zisman: NFMCC Project Manager







MUON COLLIDER R&D CO-ORD GROUP







- MCCC formed 19th March, & has had 2 telephone conferences in the last 4 weeks.
- MCCC plans to meet about once per month.

• In addition there is a framework of working meetings that enable R&D needs and plans to be jointly discussed and formulated:

 Weekly NFMCC Friday meetings which MCTF and Muons Inc. participants attend.

◆ Weekly MCTF Thursday meetings which NFMCC and Muons Inc. members attend.

 Annual meetings attended by NFMCC, MCTF & Muons Inc. members (e.g. the NFMCC annual meeting, the Low Emittance Muon Collider Workshop Organized by Muons Inc.), and their international partners (e.g. NUFACT meetings).





♦ Both NFMCC & MCTF are actively engaged in Muon Collider R&D. Creation of the MCTF provides a welcome opportunity to expand the Muon Collider R&D program in an effective and well coordinated way.

♦ It seems natural that the MCTF manage those activities that require Fermilab to play a significant role as a host laboratory, and the NFMCC manage those activities with an international character.

•We desire & expect NFMCC participation in MCTF managed R&D.

• Successful and timely completion of the NFMCC international commitments (MERIT, MICE, International NF Studies) is seen as a high priority.

- The coordination group will strive to ensure:
 - Clear lines of responsibility for each R&D sub-activity
 - Adequate discussion of R&D priorities to inform decisions
 - No artificial barriers to cross-participation between NFMCC-managed and MCTF-managed activities.





Present emphasis on design work and international activities (e.g. MICE & MERIT)



Present emphasis on design work and activities where FNAL plays major role as host lab.





Present emphasis on design work & International Activities

Present emphasis on design work & activities where FNAL plays major role as host lab.



We desire and expect NFMCC participation in MCTF managed R&D.

To facilitate this, we have formulated a protocol to follow. MCOG endorsement of this (or a suitably modified version) would be welcome.

- 1. The NFMCC and its members are invited to participate in the MCTF program.
- 2. If the mutually agreed upon activities require MCTF resources, the resources, milestones and deliverables would be defined by an MOU between Fermilab and the NFMCC.
- 3. NFMCC institutions receiving support for MCTF activities would do so within the framework of the NFMCC (i.e., through the process defined in point 2).
- 4. Institutions participating in the MCTF that are not presently part of the NFMCC would be encouraged to join the NFMCC if this seems appropriate (decided by mutual discussion between the MCTF and NFMCC leadership).



• Co-ordination of Muon Collider Design studies in the NFMCC and MCTF. There is already a lot of cross-participation in working meetings. The MCCC will solicit a coherent plan from the relevant co-leaders in the NFMCC and MCTF design study groups.

• Joint Meetings. The MCCC will identify those meetings that should be jointly organized between the NFMCC and MCTF. We will also encourage meetings jointly organized with Muons Inc.

• Evolving R&D priorities. The MCCC will encourage cross-participation in main NFMCC & MCTF meetings to help facilitate a common understanding of the R&D challenges and priorities as they evolve.







• Steve Holmes (on behalf on MCOG) requested the formation of a NFMCC-MCTF Muon Collider R&D coordination group (MCCC).

• We think we have made a good start with a solid plan for how to make the NFMCC and MCTF efforts coherent, complementary, and "effort-effective".

• We are at an exciting period in the development of Muon Collider concepts ... the challenges are great, but we think that together, the ongoing and proposed NFMCC and MCTF R&D programs give us the best chance of meeting the challenges for the next step in the R&D.

• The MCCC is eager to maximize the effectiveness of the joint Muon Collider R&D programs.

