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# **Mu2e: Introduction and the Fermilab Context**

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Director's Independent Design and CD-2/3 Review  
of the Mu2e Project

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# Mu2e in Context

- The Mu2e experiment is an integral part of the US HEP Program, and therefore is a central activity at Fermilab
- The larger Muon campus physics program, which includes both the Muon g-2 experiment and the Mu2e experiment, is one of the main focuses of the laboratory's efforts over the next decade
- Together with the neutrino program, the muon program defines the U.S. domestic accelerator-based particle physics program for the next decade

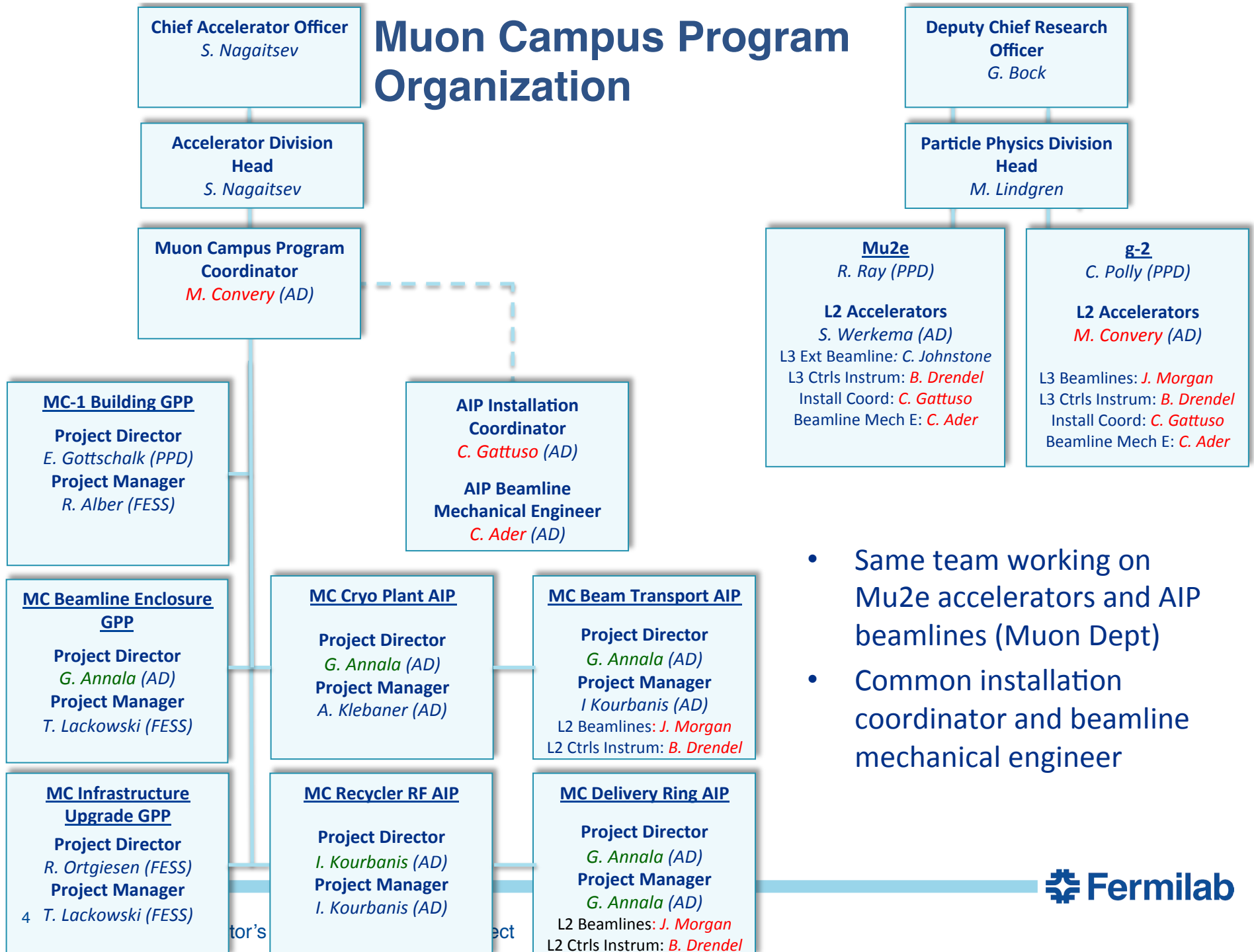
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# Mu2e is One Element of an Integrated Muon Program

- The Muon g-2 and Mu2e Projects depend on non-project upgrades to the accelerator complex and infrastructure, a collection of activities called the Muon Campus Program
- The larger Muon Program integrates three components:
  - Muon g-2 experiment (DOE O413 Project),
  - Mu2e experiment (DOE O413 Project)
  - the Muon Campus Program (Accelerator Improvement Projects and General Plant Projects, funded through Accelerator Operations funding)
- Advantages: integrated planning reduces total costs and ensures overall success
- Risks: Interdependence...stumbling on one piece may affect the others

***We understand the advantages and risks and are working to ensure success of the integrated program***

# Muon Campus Program Organization



- Same team working on Mu2e accelerators and AIP beamlines (Muon Dept)
- Common installation coordinator and beamline mechanical engineer

# Integration

- Interfaces and dependencies between Mu2e and the non-project Muon Campus program are ensured through actively managed ***Interface Milestones***
- The establishment of requirements and specifications of the common elements involves all stakeholders
- Configuration Management and Change Control processes in place and incorporate relevant stakeholders

***We recognize the need to manage the interfaces and dependencies and have the necessary processes in place to do so***

# Oversight and Decision-Making

- Monthly Project Management Group (PMG) meetings of Muon g-2, Mu2e and Muon Campus
  - Attendees include (at a minimum) the Project, PMs for all three Projects, Sr Mgmt incl Division Heads, key Dept. Heads
- Monthly Project Oversight Group (POG) meetings
  - Review of performance of all ongoing construction Projects (and the Muon Campus)
  - Attendees include (at a minimum) Laboratory Director and all Sr. Management, Division/Section/Center Heads, Project Managers
  - Forum for raising resource needs and conflicts
- Muon Campus Meeting w/Lab Management
- Integrated Budget and Planning
  - Budget decisions and conflicts managed at Sr. Management level

***We recognize the complexity and have the necessary organization and processes in place***

# History of Assessments

- Internal Review of Muon Campus AIPs, Jan. 23, 2013
- Director's Review of Project Management, March 25-27, 2013
- Director's Independent Conceptual Design Review of the Mu2e Project, May 3-5, 2011
- Independent Project Assessment of the Muon Campus Program, July 8-10, 2013
- Director's CD-1 Readiness Review of the Mu2e Project, April 3-5, 2012
- DOE CD-1 Review of the Mu2e Project, June 5-7, 2012

# Summary

- Success of the Muon Program, of which Mu2e is an element, necessarily requires an integrated approach
- While challenging compared to a standalone project or program, we appreciate the advantages and risks and are working to ensure the success of the integrated Muon Program
- We recognize the complexity and have the necessary organization and processes in place to ensure success
- Sr. Lab Management is engaged and actively supporting the integrated Muon Program

*We are committed to getting this right*