



Contribution ID: 116

Type: **Invited Oral**

J4Or1A-02: [Invited] An Update on the Colossus mK Platform at Fermilab

Thursday 13 July 2023 10:30 (30 minutes)

As part of the efforts of the Superconducting Quantum Materials and Systems National Quantum Center at Fermilab, we will construct a large millikelvin refrigeration platform known as Colossus. The Colossus platform will be used for quantum computing applications, along with physics and sensing experiments. At the preceding CEC/ICMC meeting in 2021, we reported on the conceptual design of the platform. In the intervening time, the design of the system has been completed and passed through review, with construction now underway. This paper provides an update on the overall design of the system, and the status of and timeline for construction.

Author: HOLLISTER, Matthew (Fermi National Accelerator Laboratory)

Co-authors: JAMES, Christopher (Fermi National Accelerator Laboratory); TATKOWSKI, Greg (Fermi National Accelerator Laboratory); Dr DHULEY, Ram (Fermi National Accelerator Laboratory)

Presenter: HOLLISTER, Matthew (Fermi National Accelerator Laboratory)

Session Classification: J4Or1A: Joint Session: Superconducting Quantum Systems