

DMRadio-50L timeline ... and some photos

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August 7, 2024
DMRadio Collaboration meeting at Stanford, CA

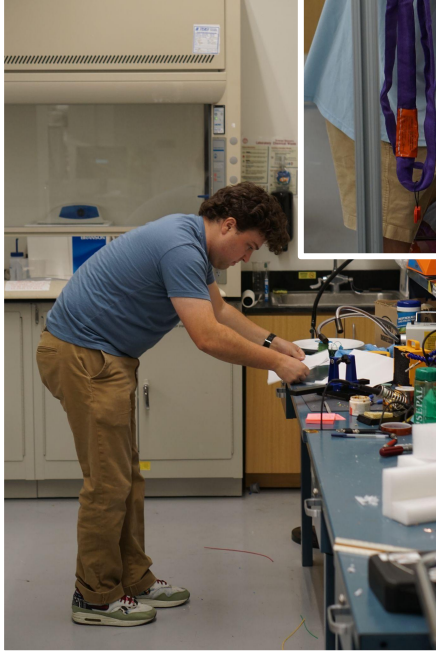
Assembly discussion and activity

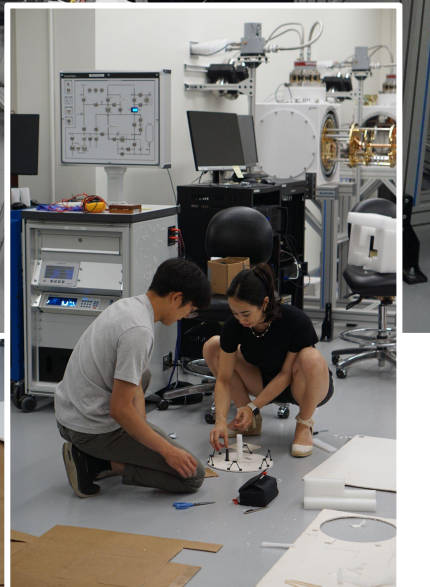
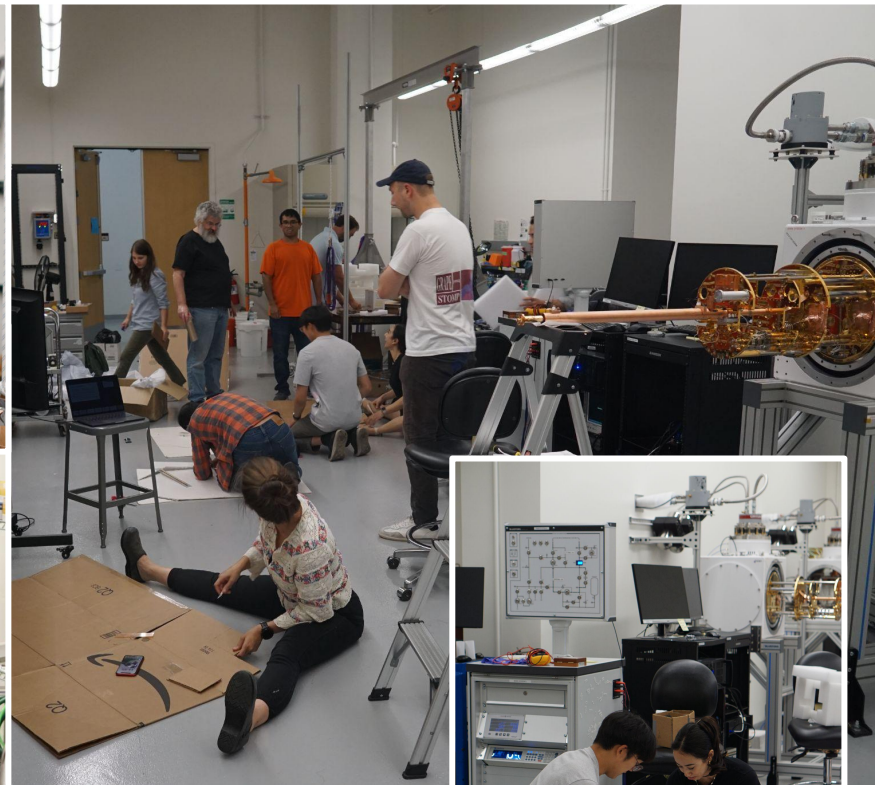
- Stepped through assembly process considering subassemblies:
 - 4 K ring (poster board)
 - 4 K flat panels (cardboard)
 - Cold fingers (3d printed)
 - Magnet mandrel (3d printed), structural legs (aluminum, PEEK), thermal legs (foam), snorkel (cardboard), skirts / pant legs (diode tower (foam), etc
 - Connector bracket, bottom sheath plate (cardboard)
 - 1 K plate and standoffs (foam, poster board)
 - 20 mK plate and standoffs (poster board, 3d printed)
 - 20 mK components: inductor frame, attocubes, hutches, etc (popsicle sticks, foam, cardboard)
- Identified problems and possible solutions
- Identified necessary components that need to be designed and manufactured to make assembly of de-ceiver possible (see Chiara's slides from yesterday)
- Action items to be discussed in detail at an interface meeting soon!

DMRadio-50L assembly activity 8/6: planning

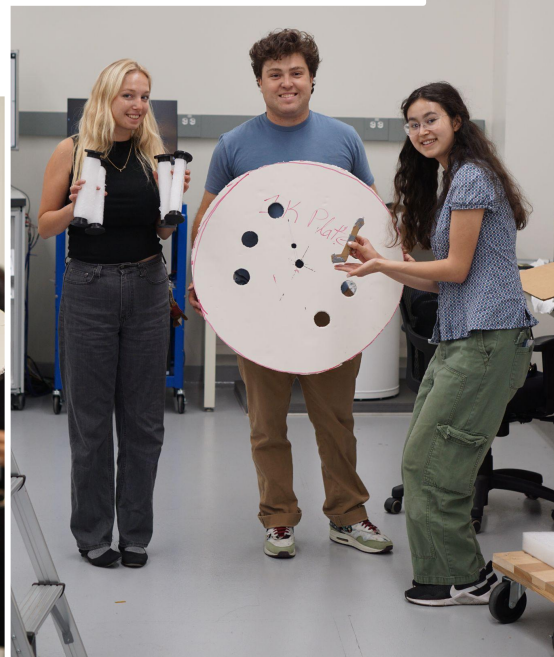
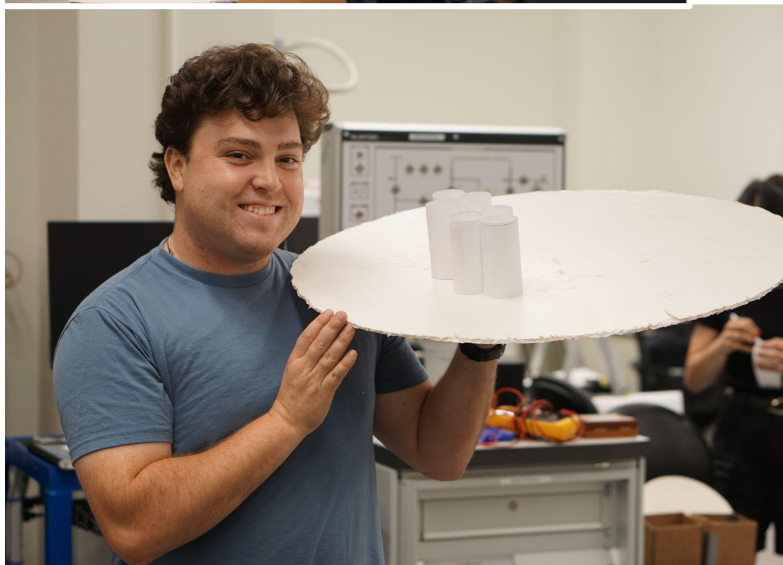
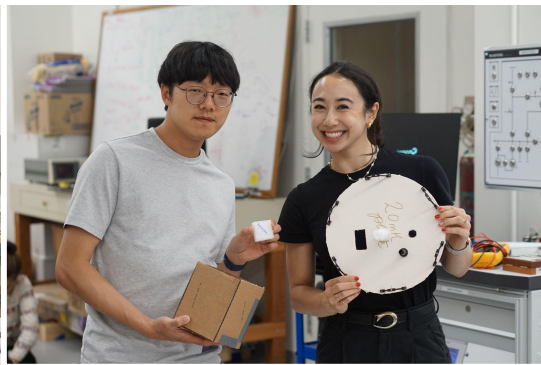


DMRadio-50L assembly activity 8/6: building





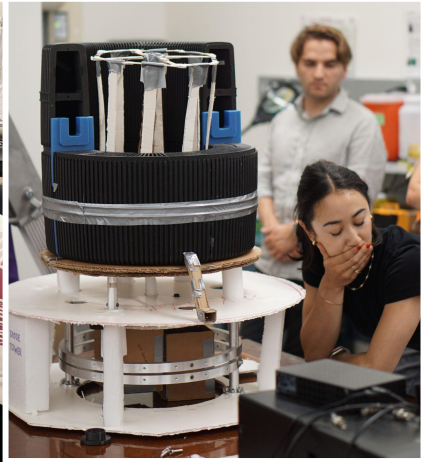
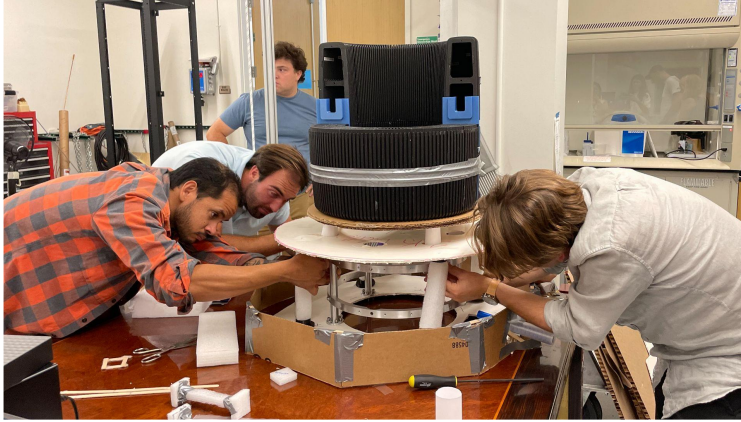
Subassemblies!





Putting
DMRadio-50L
together!

Testing assembly process!



Timeline of building up DMRadio-50L

Room temperature stand - finalized design by September

1 K and 20 mK plates and standoffs - finalized design by September

Cold snout flexible connections - to be completed by September

DAQ - full deployment of sequencer by late September

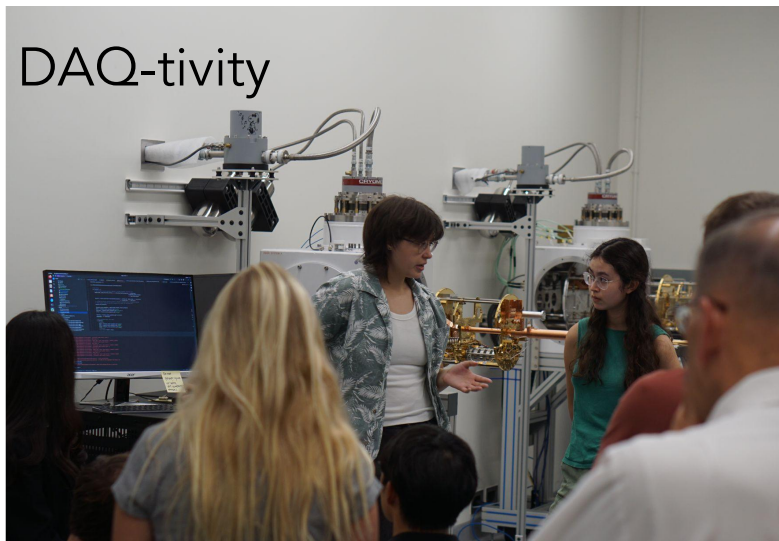
Facilities (power, water, lights) - to be completed by October

Woodstock - system ready by November

Cold snout - goal to reach target performance by November

Magnet - system ready sometime in the fall

DAQ-tivity



BBO





