Update on large MWPC prototype

- We had 4 non-functional or low-functional wires
  i. Not working. Bad 100 Ω series resistor: replaced. Wire fixed.
  ii. Low amplitude. HV capacitor not soldered in place: soldered. Wire fixed.
  iii. Low amplitude. HV capacitor not soldered in place: soldered. Wire fixed.
  iv. “Hot” wire, 400 mV signal at 150 kHz. No obvious problem visible on that channel, even with wire under a microscope: replaced wire. Wire fixed.
- Putting wheels on the MWPC so we can roll it out of the clean room.
- Working out details of being able to roll the MWPC into a truck, cushioning and securing the MWPC with wires vertical.

Wire electroplating study

- I have a student interested in working with me on sense wire electroplating, and detector construction.
- To get gas gain G ≈ 1, estimate that we need a plated wire diameter of ≈ 200 μm. This is ×10 the bare wire diameter. I don't know if this is possible.
- The carbon tubes have an OD of 700 μm
- The weight load on the sense wire due to 200 μm electroplating is similar to the carbon tubes. In terms of mechanical stress on the sense wires, electroplating has no advantage over carbon tubes.
- May try electroplating sense wires and putting them into the small MWPC prototypes we've discussed building.