

# SLAC Activities Update

University of Wisconsin

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LZ Madison Group Meeting

June 15



**WISCONSIN**  
UNIVERSITY OF WISCONSIN-MADISON



# Monday

- Finished the currently required SLAC Training Courses
- Attended weekly planning meeting
- Sorted lab supplies
- Learned how to use the orbital welder
- Made a small amount of bamboo (cut pipe and re-weld to gain experience using the orbital welder)

# Tuesday

- A lot more lab organizing
- Replaced piping (using the earlier acquired welding skills) on a Krypton panel to allow the insertion of burst disks.
- LZSim meeting

# Wednesday

- Transported a large number of pipes into the lab.
- Programmed the welder to weld 2 inch pipes.
- Cut and welded a 2 inch pipe to test welding this size (the welder and our associated hardware is not really designed to do things this big so success was not guaranteed).
- Removed bellows from aforementioned pipes so that they could be reused.
- Group meeting (Maria Elena talked about computing stuff).

# Thursday

- Went to, and looked through, our storage area to find and transport back many pieces of needed equipment.
- Built and placed storage cabinets.
- Organized, unpacked, and stored the equipment around the lab space.
- Welded pipes and bellows into the needed length for installing pipe lines from the Thermosyphon to the TPC and associated hardware.

# Friday

- Another Group meeting.
- Assisted Wei in cleaning and hanging the central part of the purification apparatus.
- Social event with people from other experiments at SLAC.

# Monday (08)

- Set up flow-checker (little decorative windmills) in front of the a vent in the hut to ensure the vents are working at a glance.
- Weekly planning group meeting.
- Got measurements and figure out what is needed for materials to construct stand for the Krypton Removal panel.
- Found, sorted, and stored T-Slot Hardware.

# Tuesday (09)

- Went to the storage area and found most of what was needed to build the stand for the Thermosyphon panels.
- Started hanging the purification apparatus



# Wednesday (10)

- Duncan came to SLAC and saw the primary lab space.
- Reassembled part of the weir reservoir.
- Met with Maria Elena and Kim
- Weekly Meeting

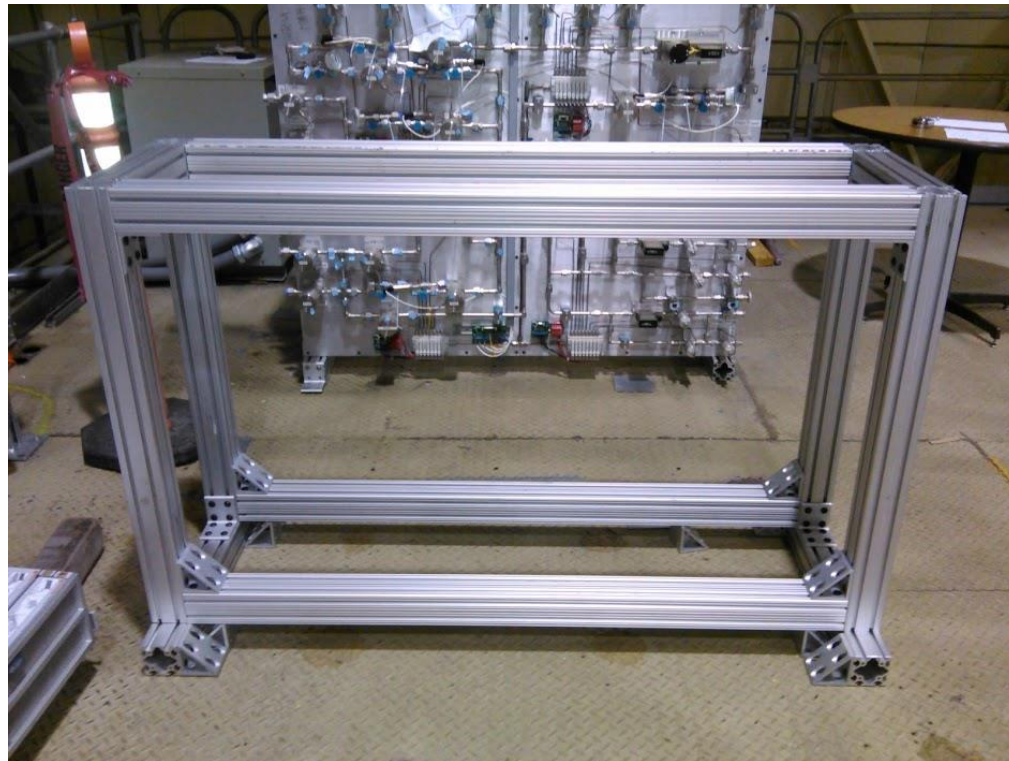
# Thursday (11)

- Hung (and continued to reassemble) the weir reservoir.
- Got the rest of the T-Slot needed for the thermosyphon panel stand.
- Received band saw training.



# Friday (12)

- Measured, cut, and deburred T-slot pieces.
- Built Thermosyphon panel stand.



# Study Progress

- Working through *Relativity, Gravitation, and Cosmology: A Basic Introduction* by Ta-Pei Cheng
- <ftp://ftp.physics.uoc.gr/pub/tmp/TasosK/Relativity,%20Gravitation,%20and%20Cosmology.pdf>
- Read through and did review questions and problems for the first three chapters.
  - Book overview
  - Basic Special Relativity
    - Time dilation
    - Length Contraction
    - Lorentz Transformations
  - Equivalence principle
    - Gravitational Time Dilation
    - Gravitational Red Shift
    - Conceptual introduction to light deflection