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DANGO (Doings and Goings On) - Vol. 22 | Issue 8

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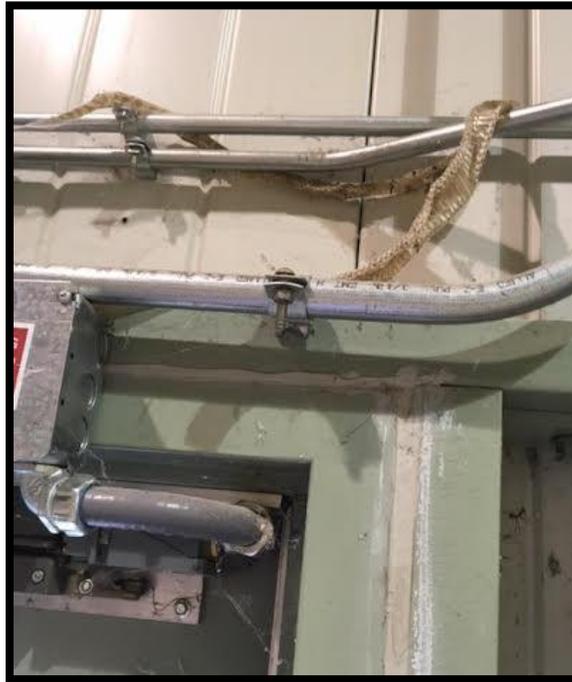
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DANGO (Doings and Goings On)

Picture of the Week Winner: "The Basilisk of SeaQuest" -Dr. D



Group Updates



FROM MATTHEW KIMBALL:

Dear DANGO,

This week has been a push. I've been finishing up measurements for the

Electronics Study and writing it up. I actually just finished the rough draft so I am excited for a relaxing weekend to come. Other than that there isn't much to report.

Have a good weekend,
Matthew Kimball

FROM CECILY TOWELL:

LOL Dango,

Made it back from Honduras this week, it was a super amazing trip. We made 36 houses, held a clinic for 3 days,

hosted 3 VBS's and did lots more.
Unfortunately I was sick a few days after
we got back so I only worked on
Thursday and Friday. At work we just
began making another mRPC for testing,
which is always super fun.

Later,
Cecily Towell

FROM ARIC TATE:

Hello everyone,

Still waiting on r134-a (freon) so
that we may resume testing the 6 gap
mRPC. A 3 stack, 15 gap mRPC is in the
midst of being built while we wait to test
the 6 gap mRPC. Besides that, we have
done some exploring of the PHENIX
remains with the hope of participating in
deconstruction sometime in the near
future. I have also started to revisit my
NIFFTe alpha rate analysis, oh how I
missed it.

-Aric

FROM HALEY STIEN:

Hey Dango,

This week I helped disassemble and
reassemble an mRPC made with non-static
Mylar. I also learned that unsteady hands
and soldering do not go well together,
especially for innocent bystanders (Cecily).
Other than that, I spent some time trying
to get LaTeX on my computer and fitting
some of the graphs from the electronics
study with equations. Now I think I need to

start figuring out what I'm going to write
about for the CEU.. which is kind of
stressing me out.

-Haley

FROM DR. TOWELL:

Hello DANGO,

It is great to be Dango-ing with you
again. During the two weeks that Cecily,
Ensley, Travis, and I were away we worked
with a group of about 50 Christians on a
mission trip to Honduras. We were
blessed to be part of this group that shared
God's love. We provided food, water,
medicine and shelter for many of the poor
there. We returned to the good ol USA just
in time for the fourth of July. That was
excellent timing, because I needed an extra
day of rest.

This week the BNL team has started
assembling a 15 gap mRPC, written a
PHENIX tech note on the high frequency
performance of our electronics, salvaged
racks of spare gas parts, and improved a
NIFFTe alpha rate study. In addition to
these fun tasks, I've had the joy of expense
reports, budgets reports, subcontract
renewals, transfer agreements, research
reports, and other red tape.

The deadline for CEU is coming
soon. Time to start writing up your
work. Also, don't forget to get a passport if
you don't have one.

Grace and Peace,
Rusty



FROM VICENTE ROJAS:

Spending the 4th of July in Abilene was very enjoyable. Monday morning, I went to the Hillcrest parade and had homemade ice cream. For lunch, I met up with ten Korean students who are taking an ACU summer camp at a ranch in Buffalo Gap.

I was assigned two new projects this week. The first one had to do with the addition of a chemical feed system to an existing water treatment plant in Missouri City, TX. Given the recent floods in that area, manganese levels increased. The presence of manganese in water can leave stains in tubs and sinks. Manganese is not hazardous and it is considered a secondary drinking water standard. I started off by looking at existing plant drawings and gathering specification sheets for different instruments. I did some drawings of my proposed chemical feed system and presented them to Jordan, my boss. My second project consisted of receiving a crash course on preliminary desalination design. I was assigned to look at the performance of reverse osmosis (RO) systems from four different manufacturers. RO is a process in which different chemicals are removed from the

water as they pass through porous materials. RO is an extremely effective technique given that it removes up to 97% of undesirable chemicals from the water. Each RO manufacturer had their own software simulations that only showed their products. Multiple iterations had to be run with each software in order to find the product that would give the best results. I finally got the software simulations working appropriately on Friday.

-Vicente



FROM CALEB HICKS:

<Generic Greeting>,

This week started with Monday off for the holiday, and then I had night shift Tuesday. I didn't work Wednesday since I needed to fix my schedule from shift, so I really only started normal work on Thursday. I finally got something to work on though. I am working on making a root macro compile with sqerp. I've made some good progress on tests, so I've actually got a lot done this week considering I've only worked a couple days.

<Generic Send-off>,

Caleb Hicks

FROM ZHAOJIA XI:

Hola Dango,

This week is awesome! I started taking day shift since Wednesday, everything goes well until today. We had several short chamber HV alarms, so lowered the HV for D2U from 1645v to 1600v. While I am taking shift, I am very close to finish my code. I finally got real data for hodoscope efficiency this morning, so I am twisting my code and let the program read data. This afternoon Paul, Caleb, Josh and I went to a tour which is about Do and Tevatron. Do is a detector where proton and anti-proton collisions happened. The tour was amazing, we have learned a lot about particles and high energy physics. Besides taking shift, on Monday and Tuesday I went to Chicago to visit my mom's best friend, she is very close to me so I call her mom. We went to international museum of surgical science, did some shopping and went to see fireworks in downtown on July 4th. Also I got my favorite drink (Caramel green milk bubble tea) in Chinatown. We had a great time and I am so glad that I got to visit this beautiful city again.

Talk to y'all soon,
Zhaojia(Tiffany) Xi

FROM JOSHUA MARTINEZ:

Wassup DANGO,

To start I want to hope everyone had a great Independence Day and are enjoying the short work week. To sum up

my week a lot of progress has been made on our project but we still have a long way to go. Tuesday was somewhat unproductive because I needed to use hand power tools (mainly a Jigsaw) but I did not have the "Hand Power Tools Safety Training" done. Most of the day Tuesday consisted of trying to figure out when this training class is offered so I can start working on my project only to find out near the end of the day the class was no longer offered. By the time this was figured out the day was consumed by the collaboration meeting held every Tuesday afternoon. Wednesday I began to cut the add-on for our cosmic ray stand and unfortunately I only had plywood and a Jigsaw. As any carpenter would know, if you are cutting plywood you would like a nice table made out of Sawhorses, a larger sheet of plywood, and a circular saw. With these items you can make cuts that are smooth and that will fit together nicely. Unfortunately I did not have these so my cuts are not the smoothest, and if you ever used a Jigsaw to cut plywood you will believe me when I say this. I had an upper body workout that will last me the rest of this year. Thursday I started to assemble the box and thankfully the sealant we are using to make the box light tight seems to be filling in all the holes and gaps very well. The only problem we have now is the fact that we ran out of sealant, which is the only thing prohibiting us from advancing any further with this project. Friday we plan on taking a tour of Do and Tevatron

in the afternoon so hopefully we get more sealant before then so we can make a little more progress today.

Sincerely,
Joshua Daniel Martinez

FROM PAUL CARSTENS:

Greetings!

Things have been accomplished! Despite losing a couple days to night shift, I've made good progress on the Cosmic Death Lazer Test Stand (name pending). I got the test hodoscope's voltages all measured and set to appropriate levels earlier this week, and yesterday I started measuring cosmic ray flux. The result was a bit lower than expected, but still well within reason. Since the proper measurements of the SiPM efficiency can't be done till the extension is complete and checked for light leaks, and because taking cosmic ray background measurements is very slow work, I'll be filling in for Reuben by working on some jTracker analyses for the next couple of days.

-Paul

FROM REUBEN BYRD:

Hi Dango!

So I'm currently (and have been all week) working at a summer camp, so I don't have much to report on. I'm working the owl shift this next week though, so that should be exciting.

Peace,
Reuben

FROM DR. MIKE DAUGHERITY:

The SeaQuest experiment is semi-officially in the "just keep charging ahead until the end of summer" phase. We've reached the point where we will ignore any problems we possibly can and just keep taking data until the run ends. This is always an interesting operations challenge. Little problems accumulate during the 9-month run period. You fix what you can (or what you can't live without) and everything else waits until after the run. For example, the D2U drift chamber started acting up on Friday. It is at least a four day job to remove it, fix it, reinstall it, survey the new position to a tenth of a millimeter, and start running again. At this point we are better off running at a lower voltage and reduced efficiency instead of fixing it. These are the same choices racing teams make in lap 460 of the Indy 500. In other words, this is a good time to keep an extra roll of duct tape handy.

While it is awesome that the run was extended by several weeks and that ACU is here to take so much great data, we are all a little disappointed to miss the shutdown. It is a lot of fun to run downstairs and finally get to fix everything. But, as always, we do the best we can with what we've got.

-DrD

In Other News..

With the deadline for abstracts approaching, it might be useful to check out some links to the Fall Division of Nuclear Physics Meeting and the CEU Home Page:

<http://dnp2016.triumf.ca/>

<http://www.uwlax.edu/CEU/>

Picture of the week candidates

Dr. Towell: "One of the 36 homes we helped build in Honduras."



Zhaojia: "Find my favorite minions."



Dr. D: "Something's waiting for you to come home."



