

DANGO

(DOINGS AND GOINGS ON)

UPDATES FROM THE STUDENTS

From Spenser Lynn:

“Hello DANGO! This week I have dusted off my art skills to paint shielding blocks. Over the past two days we painted Bob Haight’s flight path and on Monday, we’ll tackle the much smaller task of painting 90 Left. In case anyone is curious about the colors, Bob’s flight path is American Blue and 90 Left will be white. A lot of time has been spent working on moving equipment into 90 left and getting things arranged correctly for the upcoming run. On the glove box front, I have a procedure and will be testing it first thing Monday morning. Coming up soon is the LANSCE poster session and the undergraduate symposium so I’ve been writing abstracts and getting a poster put together for both of those. On the plus side though, I’ll already have a poster ready that can hopefully be used for future events. Thursday was the student-mentor picnic at Urban Park and since Fredrik was out of town, Paul, Dana, and I borrowed Rhiannon for a couple hours of food, music, and the collection of free stuff (swag). There was also a live musical performance by a student who I am fairly certain is the reincarnated soul of Barry White. Entertaining? Yes. Awkward and out of place? Definitely. I am leaving Thursday night for a mini-vacation in Las Vegas so I am really excited about that! Hope everyone else is having a great time!”

From Andrew Miller:

“Hello again DANGO, I realize that I didn’t submit anything last weekend, but I have a good excuse, because I was visiting Berlin. I was planning to write something Friday, but I forgot to during work, and my train left around 8, so I went back to the apartment and did some packing. So these are all the exciting things I’ve done in the last two weeks, again condensed into one DANGO.



At work I've been rewriting all the unit tests for the project I'm working on, because they are supposed to check that the program in question does everything it should, including giving the right errors when you try to do things it shouldn't. Unfortunately, several of the tests were far from this, and required about 1000 more lines of code to be complete. I've just finished those up though, and found and fixed several bugs in the program along the way, so it wasn't in vain at least. Now I've just started working on some functions to read in data from files.

Like I said, last weekend I took a trip to Berlin. I left Friday evening, and came back Sunday evening. I was able to see quite a lot in the two days I was there, and also learned quite a bit about East Berlin's history. I visited the Brandenburg Gate, Checkpoint Charlie (I went to the museum and even bought a rock, which is supposedly from the Wall... There were rocks for sale all around the city, I think that must be the staple of the tourist industry there), the Currywurst museum (the only one in the world!), went up to the lookout platform of the TV



tower (the second tallest structure in Europe), and saw the Amazing Spider-Man (I'm not going to say it was amazing, but it was pretty good). The second day I visited the Kaiser-Wilhelm church, went to the International Hand-Organ Festival (I was glad that I went that particular weekend), went across town to a neat outdoor antique market, and finally went to the zoo for a while (Unfortunately most of the animals were hiding), and then took a train back to Hannover. My original train was delayed, so I got to take the ICE, which is the much nicer, faster train. It was much more comfortable than my ride there. It was a busy weekend, especially the first day, since I never took a train until I went to the theater that evening, so I got quite a bit of walking and standing in.

Next week is my last week in Germany, so I've also been organizing some of the potentially useful code I've written for timing things so that people will be able to use them when I'm gone. I haven't sent in any pictures yet, so here are a bunch from my trip to Berlin to make up for that. The pictures are of the Brandenburg gate, Checkpoint Charlie, an interactive currywurst making game from the currywurst museum (currywurst in Berlin is like a hot dog in New York City, they have little stands everywhere. It's a hotdog covered in ketchup, with some curry powder on top), and the view from the TV tower (the Fernseherturm).

I hope everyone is having a good summer!
 –Andrew Miller”

From Aric Tate:

“This week was a busy one. With Dr. D leaving we had to make sure and use the Kung Foo Master’s wisdom before it would require an email. Besides the usual software work and histograms we took Rad Worker training and received our TLD’s (along with the fancy blue RHIC card), talked through the first half of a physics paper and attended a talk on the Higgs. Also, we finally have the working CAEN high voltage power supply and hope to have the cosmic stand running soon. Mat is working with temperature monitoring of the RPCs, Ramsey is still creating his beautiful histograms, Walker turned out some graphs on HV vs. Noisy Channels and I have produced some graphs (using Dr. D’s handiwork) showing Noisy Channels as the High Voltage is increased by 5mV. Things are really starting to pick up here towards the end, and we’re trying our best to divide and conquer tasks as they appear. Adios”



From Ramsey Towell:

“What up Dango,
 This week at the exquisite institute of Brookhaven National Laboratory I was on the computer almost the whole week creating more beautiful histograms. We're still working on analyzing data from the last run about which channels are noisy or dead on the RPC's, but we are almost done with them and soon we will be running tests on some chambers in the cosmic stand that is nearly operational. Me and Mat went to into the city on Saturday which was pretty fun but it was also very exhausting because we didn't use a single subway the whole day. Oh also we captured the notorious Big Buford last week and I will be putting the video documentary of the capture on Facebook in the near future, so you all have that to look forward too next week.

–Ramsey”

From Mathew Solomon:

“Howdy Dango,
 This past week has been a pretty solid work week. Monday we completed our Radiological Workers training web course and began discussing our topics for our CEU abstracts. Tuesday we took the

classroom session or part 2 of our RAD workers training and obtained a TLD which now enables us to go into more restricted areas such as the tunnels where the beam pipe is. Wednesday, we went to a talk over the Higgs Boson and that was pretty interesting. Thursday an expert on this server box that I'm working with came in and helped set up the server so we can get the ball rolling on this temperature study that I'm conducting for RPC1. I started researching client programs that works with this server so we can take temperature data and read them.

–Mathew Solomon”

From Walker Nikolaus:

“This week we hit the ground running by studying up to become knowledgeable about radiation. We took some training and then took a class and test on Tuesday to allow us into radiation areas. By passing the test we received a TLD, and access to most of BNL. I, of course, received the highest possible grade on the exam. NBD. Once access was granted, we checked out the RHIC ring (check out the pic). We might be adding some shielding to the ring latter this summer. The rest of the week was spent on hv vs noisy/dead chs and on analyzing more data. Mat and I also hooked up some ribbon cables. Only two weeks left. Summer has gone by quickly. Live long and prosper.”



From Noah Kitts:

“Hello,

This week has been pretty productive. We continued with our wiring shifts, and I have also been working on my abstract. Since my topic is on the beam monitor hodoscopes, I am the one figuring out how to mount them and test them and

everything. I have already started, and I'll probably be working on that all next week also. Cindy has been gone from the apartment this week so everyone has severely missed her cooking. I would also like to add that I am listening to the Lord Of The Rings soundtrack as I type this DANGO report, and it is making my week seem far more epic than it was.

–Noah Kitts

UPDATES FROM THE PROFESSORS

From Dr. Donald Isenhower:

“Dear Dango's,

Report from Dr. I at Fermilab. My accomplishments this week were to get topics assigned to students for CEU, fixing the LeCroy 1440 HV power supply for stations 3 & 4 hodoscopes (twice), proving that the full electronics chain for the hodoscopes that are read out with PMTs on both ends works correctly, figured out the actual values of capacitors in the HERMES bases used on stations 1 & 2 (a MUCH harder task than those of you who have never taken electronics know), started my PHENIX talk I'm giving in 2 weeks, got ACU listed officially as an institution that can work at LANSCE (I've only been doing experiments at that accelerator complex since 1979), verified that at least one of the four PMT/bases I found will work beautifully for the new beam monitor Noah will be using as his subject for CEU, pushed the students into getting Kerberos working on all their laptops so that they can log into our DAQ machines, checked periodically on wire stringing progress in Lab 6, have been reading/editing CEU abstracts, turned in the ACU NIFFTE monthly report, and various other sundry items. And now I've completed an extremely run-on sentence.

So the summary of this is that I think I got enough things done to earn my pay this week, and as I'm writing this on Thursday afternoon, I hope to have more things to report next week.

–Dr. I.”

IN OTHER NEWS...

From Dr. Rusty Towell:

“Hello Dango,

Another busy week here at BNL. The cosmic stand is getting closer and closer to being operational. The HV supply is working again. The DAQ is working. We've been promised that the gas will be turned on Monday. So hopefully by this time next week we'll have a bunch of efficiency data for the spare RPC1s.

Also in the factory we've got a new system to help monitor the temperature profile of an operating RPC1. During the past run the RPC1s got too hot and had to be turned off. However, there were only a couple thermocouples monitoring the temperature from the outside of the modules. We are going to measure the temperature profile through the RPC to better monitor the temperature of the bakelite gas gap. That's the part that can be damaged if operated at too high of a temperature.

Everyone finished Radiation Worker I training this week, so we were able to go into the tunnel and look at the shielding job. It looks like there is a good chance that we will get to help add some steel bricks under the beam line. This made a good opportunity to take some pictures.

Monday we will be giving an extended update on our hot and dead channel analysis using data from Run 12. The guys have been doing lots of analysis work and we are now excited to share it with our collaborators. Friday was the last day for Dr. Daugherty to be at BNL. We will miss his expertise but know that our loss is FNAL's gain.

Grace and Peace,
Rusty”

SPS Congress is coming up! If you haven't already, contact Dr. Head at tlh07b@acu.edu as soon as possible if you are interested in going!



2012 Quadrennial Physics Congress

- Date – November 8-10
- Location – Caribe Royale Hotel, Orlando, Florida & **NASA'S KENNEDY SPACE CENTER!!!**
- For further information visit spscongress.org.

Once every four years Sigma Pi Sigma, the physics honor society, hosts a unique meeting that brings together undergraduate and graduate physics students, practicing physicists, and physics alumni for a weekend of cutting edge science and reflection on the role of the scientist in society. The Quadrennial Physics Congress (PhysCon) is unlike any other physics meeting, combining round-table discussions, distinguished speakers, and laboratory tours with poster sessions and celebrations of art and science.

The 2008 Congress was an energetic, inspiring meeting of more than 600 physics students, faculty, and alumni at Fermi National Accelerator Laboratory in Batavia, IL. The 2012 PhysCon will build on the energy and enthusiasm of the 2008 Congress with an anticipated 80 participants exploring the theme Connecting Worlds Through Science and Service in Orlando, FL, near the home of the Kennedy Space Center. Be part of the action in 2012 – make plans now to attend PhysCon!

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