Friday Flyer – February 1, 2013

CENTER SPOTLIGHT - University of Texas at Arlington
http://www.compadre.org/ptec/quarknet/QuarkNet.cfm?ID=166

Contact Andy White for tips on hosting both students and teachers in a workshop. This year there were two main QuarkNet activities at UTA: the 2012 masterclass and a weeklong workshop for teachers. Six students from Eagle Mountain-Saginaw High School attended the masterclass on March 24. Andy White gave an introductory lecture, and students analyzed ATLAS data, "discovering" the Z boson and a new Z' boson! Following the masterclass, they received good feedback from the students who told their friends that they should have come.

During a week in June, they held a workshop including talks on topics such as: Introduction to High Energy Physics, Basic Concepts, Particles and Forces, Introduction to Experiments, Detectors, and Basic Detector Operation. A detector workshop was the focus of the next few days. Fourteen teachers learned how to build a detector, test and collect data. They presented their findings in posters, one of the many tools e-Labs provide. On the final day, they discussed the future of particle physics—experiments and facilities.

News from QuarkNet Central - http://quarknet.us/library/index.php/Schedules_2013
Real LHC data takes center stage! Check the schedule for masterclass orientation and videoconference times. Contact Ken Cecire with questions.

Physics Experiment Roundup - SNOLAB - Break out the bubbly: http://www.snolab.ca
http://www.fnal.gov/pub/today/archive/archive_2013/today13-01-30.html
SNOLAB is an expansion of the existing facilities constructed for the Sudbury Neutrino Observatory (SNO) solar neutrino experiment. Located a mile underground, SNOLAB, seeks "the most exotic cosmic particles of all: the constituents of the famous dark matter that swarms throughout the space of our galaxy and throughout the universe." (from Fermilab *Today*, Jan. 30, 2013)

Resource of the Week
http://epweb2.ph.bham.ac.uk/user/watkins/seeweb/BubbleChamber.htm
Bubble chambers were an integral tool for early particle physics experiments. Although these chambers are now museum pieces, it can be interesting for students to go through an investigation using actual photos.

Just for Fun - Twitter reveals how Higgs gossip reached fever pitch
http://www.newscientist.com/blogs/shortsharpscience/2013/01/twitter-higgs-gossip.html
In the days leading up to the Higgs announcement, social media was abuzz with rumors, and guesses. "The traffic— amounting to more than 1 million tweets—provides a neat reflection of real-world excitement," and how it is shared. (from *New Scientist*, Jan. 21, 2012)

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