

Friday Flyer – May 18, 2012

Hello Mentors and Teachers! Welcome to the QuarkNet Friday Flyer. We are initiating a weekly online newsletter to spotlight our centers and bring you news from QuarkNet and particle physics experiments.

CENTER SPOTLIGHT: Southern Methodist University, Dallas, Texas

<http://www.physics.smu.edu/~olness/quarknet/>

Find out about SMU's Physics Circus and special symposia for QuarkNet teachers and students! Please contact Simon Dalley or Randy Scalise.

Begun in 2000, the SMU QuarkNet Center is a large, active teacher network of 12-15 teachers in the Dallas-Fort Worth metroplex. SMU holds a weeklong summer workshop with activities such as SMU's Physics Circus and construction of demonstrations—Thomson's coil jumping rings, magnetic brakes and cold candle optical illusions to name a few. A unique feature of SMU's program is the Standard Model talk given each year by one of the teachers. In addition, teachers present talks or demonstrations they have used in class. During the academic year QuarkNet teachers and students are occasionally invited to symposia where speakers like Brian Greene have met them prior to the public lecture. This summer teachers will participate in a LIGO e-Lab workshop, visit the LIGO Observatory in Livingston, Louisiana and build classroom interferometers.

News from QuarkNet:

International Muon Week, April 16-20: Did you participate? A total of 41 detectors were online taking data at the same time. You can see the map for more information about who was involved and where they took data: <http://www.learnaboutenergy.org/CosmicMap/CosmicMap.html>

Cosmic Rays in Korea: Bob Peterson and Kevin Martz ran a three-day cosmic ray workshop at Deagu, Korea in conjunction with the International Linear Collider Meeting. Bob and Kevin were very impressed by the dedication of the eight teachers. One teacher already wants to purchase a detector, and another is making plans to visit Fermilab with his students. In July, Bob and Ken Cecire will be heading to Beijing to facilitate a cosmic ray workshop and an LHC masterclass.

Spring National Meetings: AAPT was in beautiful Ontario, California. NSTA held their meeting in Indianapolis. Conferences spotlight resources and pedagogical techniques and provide an opportunity to network with other teachers. If you haven't been to a meeting recently, you are missing out on great teaching ideas.

HST: Five teachers will attend the annual three-week High School Teachers at CERN program. Congratulations to Tiffany Coke (Hawaii), Jay Dornfeld (Minnesota), Sarah Karbeling (Iowa), Jeff Paradis (New York) and Kevin Wolf (Maryland).

Particle Physics Experiment Roundup:

Daya Bay-Beijing, China; Berkeley, CA; and Upton, NY
<http://www.interactions.org/cms/?pid=1031513>

The Daya Bay Reactor Neutrino Experiment, a multinational collaboration operating in the south of China, reported the first results of its search for the last, most elusive piece of a longstanding puzzle: how is it that neutrinos can appear to vanish as they travel? The surprising answer opens a gateway to a new understanding of fundamental physics and may eventually solve the riddle of why there is far more ordinary matter than antimatter in the universe today.

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