

Friday Flyer – September 14, 2012

Something to share—an interesting research project or kudos for a student, teacher or mentor?
Contact Kris Whelan.

CENTER SPOTLIGHT: Virtual Center - <http://virtualquarknet.org/>

Contact Dan Karmgard for ideas on holding regular meetings online and including physics presentations for development of teachers.

Teachers in the Virtual Center are scattered geographically, far from a standard QuarkNet center. They meet once a month by videoconference and once a year in person. In 2012 they had a three-day summer workshop at Notre Dame, where their mentors Antonio Delgado and Dan Karmgard are based. While their early focus has been on cosmic ray studies, the group has become active in masterclasses. This summer they held a CMS e-Lab workshop facilitated by Dave Trapp and worked on ways to foster communication over distances. More recently, Dale Ingram from LIGO gave an online presentation about the detection of gravitational waves. The Virtual Center is far-flung with members across the country and "corresponding" members in China and Japan. The group is active but small and would welcome a few more members. Could you or someone you know benefit from joining "the Virtuals"? Contact Ken Cecire.

News from QuarkNet Central International Cosmic Day 2012

You can join a worldwide student event to celebrate the 100th anniversary of Victor Hess' discovery of cosmic particles sponsored by DESY, Germany's principal particle physics institution. Students on several continents will perform experiments, collect data and learn about cosmic rays in a one-day event. School groups from across the globe are meeting to ask questions like:

- What are cosmic particles?
- Where do they come from
- How can they be measured?

This is organized like a masterclass with groups consisting of professional scientists, teachers and students. However, on September 26 you and your students can turn on your detector, collect and contribute data to the event without the more formal agenda of a masterclass as we know it. There is no registration fee. You can easily join and participate. For more information and to register, go to: <http://www.cern.ch/icd2012>. You should have received an e-mail message about how to add your school flag to the Google map. Marge Bardeen, mbardeen@fnal.gov, can forward information about the wiki. (Marge is in Munich until Sept 24, so be patient for a reply.)

Physics Experiment Roundup: Local scientists edge closer to their field of dreams

<http://www.mysuburbanlife.com/downersgrove/newsnow/x1903464106/Local-scientists-edge-closer-to-their-field-of-dreams>

"While the spotlight has mainly been on the LHC with the discovery of the elusive Higgs particle, researchers at both Argonne National Laboratory and Fermilab collected data further confirming the existence of the boson." (From [mysuburbanlife.com](http://www.mysuburbanlife.com)) This article provides a "layman's view" of what scientists have been looking for over the past 40 years.

Just for Fun - <http://www.particleadventure.org/>

Looked at the Particle Adventure recently? Explore the updated version with better graphics and more recent information.

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