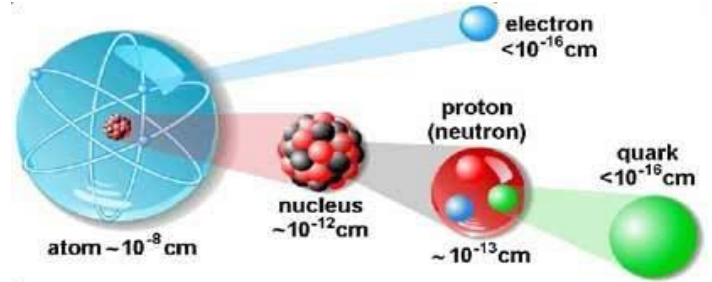




**“First Workshop 2015”
“Para Profesores de Fisica de
Escuela Superior” en Puerto Rico**

**TODAY: EXPLORING PARTICLE PHYSICS
[LHC & NEUTRINOS]**



**Héctor Méndez
University of Puerto Rico -Mayaguez,
Oct 17, 2015**

Oct 17, 2015

hector.mendez4@upr.edu

What's QuarkNet ?

- **QuarkNet** is an Educational program whose aim is to support science education in High Schools by establishing a nationwide teacher network.
- **Goal:** Bring high school Students, Physics Teachers and Particle Physicists to learn together frontline physics (MasterClass).
- **QuarkNet Centers** provides an opportunities to establish a mentor relationship between with local Universities Professor to work together on High Energy Physics (HEP) experiments and explore the world of Elementary Particle Physics

In general:

- We work with a small group of teachers to enhance better participation.
- We teach “the what”
you tell us “the how”.
- Read your e-mail !!

Why UPRM QuarkNet Center at Mayaguez ?

- o The only group in “Experimental HEP” in Puerto Rico (and probably in the Caribe) is at UPR Mayaguez.
- o Group's Projects:
 - ✓ Neutrino Experiments (SBND & DUNE @ FNAL)
LArTPC Near & Long Baseline
 - ✓ CMS (LHC at CERN Geneve)
 - ✓ Collider pp (~7, 8, 13 TeV) experiment
 - ✓ QuarkNet Center (since 2003) [~ 20 Teachers]
 - ✓ CLEOc (Cornell University at New York)
Collider e^-e^+ (~3 GeV) experiment
 - ✓ FOCUS (Fermilab at Illinois). Fixed Target
PhotoProduction of quark charm”

Prof. Ken Cecire (Univ. Notre Dame, QuarkNet Center Mentor)

Stipend: \$100 per day

Participation Certificate

Hotel: at Mayaguez

QuarkNet Centers

- ▶ **QuarkNet:** a nationwide Educational program.
[~60 Universities and National HEP Lab across de US]



funded by NSF



Our web page is: <http://charma.uprm.edu>
see outreach

**ASSOCIATE TEACHER INSTITUTE
PHYSICS DEPARTMENT,
UNIVERSITY OF PUERTO RICO MAYAGUEZ**

"TALLER DE FISICA DE PARTICULAS"

	OCTOBER SATURDAY 17, 2015
8:30-9:00	Coffee & Registration
9:00-9:45	QuarkNet & LHC (H. Mendez)
9:15-9:30	Standard Model Activity (K. Cecire/U. Bilow)
9:45-11:00	Fisica de Neutrinos (S. Santana)
11:00-12:00	Teacher Network @ Germany (Uta Bilow)
12:00-13:00	Lunch
13:00-14:30	Cosmic Rays Detection (Ken Cecire)
15:00-17:00	Detector de Rayos Cosmicos (Ken Cecire)
17:00	Evaluacion



Bienvenidos al Instituto de Partículas Elementales 2015

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