



Stories from the classroom

I joined QuarkNet in the summer of 2000 and have been an active participant ever since, including becoming an LHC fellow and making numerous presentations on my incorporation of particle physics in my classroom. The people that I have met and have had the pleasure to work with has made my joining QuarkNet the best professional decision I have made in my career. From the beginning, I realized that there is great value to teaching particle physics simply to provide a students a sense that there is still so much to learn in physics! Over the years, I have included a unit (between one to three weeks) in my classes specifically designed to teach my students about the wonder of the particle world. In the beginning, a lot of what I did was worksheet driven and lectures, but over the years the resources that QuarkNet has developed and provides all of us have made my instruction a lot more student inquiry focused and a lot less teacher centered. Whether my students are looking at historical bubble chamber images to learn about charge, momentum and energy or analyzing real events from the CMS and ATLAS detectors...they are engaging in real physics research and getting an actual idea of what life as a physicist is really like.

I would say that my involvement with QuarkNet has been inspirational, for me and for my students. My students have worked with the Cosmic Ray Muon Detector analyzing data and creating posters. A few students have actually used the CRMD for science fair projects and have done very well. The CMS elab has been a staple in my course since it was created. My students find it challenging, but many of them do enjoy creating their own research projects and publishing them for others to read. Finally, the most important project that my students experience is the Masterclass Day. To call it life-changing is not an understatement...EVERY year I have a student (and sometimes many more) who attend the event and come away with the feeling of "I'm going to do this...I'm going to be a physicist". I have been taking students to Masterclass since 2008 and every year it is a highlight for all involved. Just from that first year, one of my students went on to major in physics and has become a teacher with me at Godwin HS. She has also become a QuarkNet member! Another young lady, went on to major in physics and continued her work in Europe and recently received her PhD and is currently living in Berlin working on the IceCube project. This was just the first year...the physics majors have continued with each year.

It's actually quite simple...QuarkNet provides teachers the knowledge and resources to inspire the next generation of physicists.

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