Center for Multiscale Modeling of Atmospheric Processes, Colorado State University
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The Little Shop Of Physics Texas Road Trip

by: Brian Jones, Director of the Little Shop of Physics

CMMAP Graduate Student, Erica McGrath-Spangler talks to students about photon energy with Pulfrich Pendulum.

How much does the Little Shop of Physics weigh? The team of tie dye clad staff and students who travels the state sharing science with K-12 students and teachers has often wondered.

Each week, the Little Shop team carries dozens of boxes of hands on science experiments into a nearby school and lets the students explore. But this year, in September, the crew loaded all of the boxes onto pallets and shipped the whole traveling collection to southern Texas for a full week of programs at the University of Texas Pan American (UTPA), to take part in HESTEC, the Hispanic Engineering, Science.and Technology Week.

The experiments tipped the scales at a bit over 1000+ pounds. That's half a ton of science fun.

The crew followed soon after, nearly a dozen staff and students of the Little Shop, plus several faculty, staff and graduate students in CMMAP, the Center for Multiscale Modeling of Atmospheric Processes, an NSF-funded science and technology center housed at CSU's Department of Atmospheric Science. CMMAP provides major funding to LSOP, and CMMAP provided inspiration for this year's teacher workshops, titled "Ten Things Everyone Should Know About the Atmosphere" and this year's school tour, "How Big Is Your World?" in which we explore ideas of size and scale.

This NSF connection was the key to LSOP's participation. When HESTEC comes to UTPA, scientists and educators from around Texas and around the country converge for a full week of programs designed to expose students in southern Texas to science, engineering and math fields, and careers in these disciplines. The NSF provides major funding for the event, and they also provide connections. The HESTEC organizers wanted an outreach program associated with an NSF-funded center who could handle 1000 middle school students each day - and

CMMAP's Education and Diversity Manager, Melissa Burt talks atmospheric science with two students and Tipping Point

quickly found that CMMAP's Little Shop of Physics was about the only program nationwide up to the task.

LSOP's Sheila Ferguson and Paul Williams use air pressure to paper the audience.

It was a big week, compressing what would normally be a month's worth of work into six short days, during which a combined LSOP and CMMAP team presented workshops to nearly 100 teachers, shared a hands on science program with over 4,000 middle school students, and saw over 5,000 visitors on Community Day, assisted by student interns and volunteers from UTPA.

HESTEC is all about showing students that science is exciting, and something that students, themselves, can do. And the Little Shop of Physics is a perfect choice to deliver this message.

Sheila Ferguson, the Teacher in Residence at the Little Shop of Physics, who spent the whole week at HESTEC, says that "I love that we saw over 1000 middle school students and their teachers each day. They raved about the experiments, and were excited that they could build any of our projects. One of the students who helped us is already networking to find funding to build their own version of the Little Shop of Physics. I think that we'll see versions of our projects popping up all over southern Texas."

That's exactly the kind of outcome that LSOP and CMMAP - and their UTPA HESTEC hosts - were hoping for.