

## Sixteen “Physics on the Road” Teams Selected for WYP

Sixteen teams from colleges and universities all around the country will participate in the World Year of Physics “Physics on the Road” project. Making use of funds provided by the NSF and DOE’s Office of Science, the 16 teams will each receive a \$10,000 grant, to be used for program supplies, vehicle maintenance, room and board for participants, and other costs associated with performing physics demonstrations. In addition, four alternate teams were selected, who will also receive support as more funding becomes available.

The 16 teams and 4 alternates were chosen from among 39 applicants by a panel composed of representatives of APS, AAPT and the Society of Physics Students (AIP).

“Many of these local touring programs currently exist in physics departments across the country, but the lack of funding and external recognition limits their scope to small numbers of visits in localized areas,” said Vinaya Sathyashelappa, APS project coordinator for the World Year of Physics. “Even so, each year these dedicated groups, composed largely of volunteers, manage to reach thousands of people, the majority of which are children.”

For instance, 15 years ago, Dan Dahlberg of the University of Minnesota created “The Physics Force” outreach program for K-12 students, although the strongest focus is on sixth graders. The aim is “to create an enthusiasm for math and science in the youngest students,” through fast-paced demos that teach a series of physics concepts, each building on the ones that came before. Two years ago, the group performed for a full two weeks at Disney’s Epcot Center.

Today, Dahlberg’s performances reach more than 30,000 local students, teachers and members of the general public every year, and he estimates that in the last three

years alone, more than 2% of the total population of Minnesota attended a performance. However, most of those people hail from the Twin Cities region. The APS grant will enable Dahlberg’s group to give performances in more rural areas of the state.

Another one of the selected teams is the “Physics Circus,” a joint demonstration show between the University of Texas at Brownsville and Texas Southmost College.

### Physics on the Road Teams

Chicago State University  
Colorado State University  
Idaho State University  
Illinois State University  
Northern Illinois University  
Northern Kentucky University  
Syracuse University  
Towson University  
University of Iowa  
University of Maine  
University of Minnesota  
University of North Carolina,  
Chapel Hill  
University of Oregon  
University of Rochester  
University of Texas at Brownsville/  
Texas Southmost College  
University of Wisconsin, Madison

### Alternates

Angelo State University (Texas)  
Purdue University  
St. Mary’s University (Texas)  
University of Nevada, Reno

It is a classroom-sized program that emphasizes direct interaction among students and scientists, but to date it has not been available to students outside of Brownsville. With the APS grant money, the “Physics Circus” will be expanded into an auditorium show and travel throughout the Rio Grande Valley.

Brownsville is the largest city in the Rio Grande Valley. The region is 95% Hispanic and bilingual, poverty-stricken, and most of the parents have less than a high school education, but hope for better opportunities for their children.

The new and improved demonstration will feature such crowd-pleasing feats as moving a cart across the stage with a fire extinguisher and using a frozen banana to hammer a nail. (This also makes use of local resources, since banana trees are common in most backyards in the area.)

Faculty at Northern Illinois University provide a “Frontier Physics Road Show,” as well as an annual “Haunted Physics Laboratory,” and the APS grant will allow the group to bring these events to more remote locations, particularly community college campuses in areas where there are few other scientific activities. The “Little Shop of Physics” team from Colorado State University will be bringing its award-winning performances to schools and other venues on the reservations of four Native American groups: the Navajo, the Southern Ute, Ute Mountain Ute, and the Jicarilla Apache. And Idaho State University’s Physics Demonstration Road show will extend its performances to the surrounding states of Utah, Wyoming, northern Nevada and eastern Oregon, as well as all of Idaho. No other similar physics outreach program currently serves those areas.