

**Totals for Physics Outreach
August 1, 2006 through December 31, 2006**

Events	23
Schools Visited	17
Classrooms Visited	52
Teachers K-12 Reached	53
Students K-12 Reached	1425
Undergraduate Students Reached	3
Pre-Service Teachers Reached	3
Community Reached	70
Teachers K-12 Participating	36
Students K-12 Participating	805
Undergraduate Students Participating	2
Pre-Service Teachers Participating	1
Community Participating	496
Continuing Education Courses Offered	1
University Courses Offered	2
Courses Developed/Collaborated On	0
Activities Developed/Collaborated On	6
Number of Speakers	6
Number Reached	
Number of Participants	

Department of Physics K-12 Outreach Program
August 1-December 31, 2006

Consultation:

- The Charles A. Tindley Accelerated School, located about 2 miles east of the Indiana State Fair grounds in Indianapolis, is Indiana's first charter school using the accelerated model. The high school physics teacher participated in Purdue's QuarkNet Center, Instrumentation Week, and the Nanotechnology Conference at the university during the summer. I developed the scope and sequence for the 6th and 7th grade science classes and then consulted with the teachers and their classes over the semester.
- As part of a long-term partnership of the CoS outreach team with Frankfort and Shelbyville Schools, I consulted with teachers and helped lead professional development workshops with teachers from both school districts.

Date(s)	Event/Location	K-12 Teachers Participating	K-12 Students Reached	K-12 Students Participating	Activities Developed
8/13-12/31/2006	Tindley School Indianapolis	4	0	120	3
8/13-12/31/2006	Suncrest School Frankfort	4	100	0	1
8/13-12/31/2006	Shelbyville Schools Shelbyville	20	500	0	2
TOTAL	3	28	600	120	6

PEARLS: Physics Educational Activities, Resources, Learning Experiences

- Classroom visits” I developed The Cryogenic Temperature Show, along with 5 other content-specific interactive presentations, to deliver to individual classrooms, where students participate in discussion and, where possible, hands-on experiences.
- Physics on the Road (**POTR**): This is a one-day visit to a school where a convocation-style large-scale demonstration show is offered. It may be combined with 35 hands-on activities, similar to an Exploratorium-type visit. The school garners support from the parents, who present the hands-on activities to the students. This allows not only students and teachers to be reached, but parents to participate.

Date(s)	Event/ Location	Schools Visited	K-12 Teachers Reached	K-12 Students Reached	K-12 Teachers Participating	K-12 Students Participating	Community Participating Or Reached	Pre-Service Teachers Participating
8/24/2006	Cryogenic Temp Show Tindley School	1		40	1			
9/13/2006	Sound Activities to Otterbein School	1	1			40		1
9/29/2006	Cryogenic Temp Show Oxford Elementary	1	4	60				
10/3/2006	Cryogenic Temp Show Pike HS	1	6	300				2

10/14/2006	ROTR Ivy Tech Kokomo						70 Reached	
10/24/2006	POTR Kolling Elemen	1	25			500	36 Participating	1
10/26/2006	Classroom Visit: Legos Tindley School	1	1			80		
11/11/2006	POTR Open House at Purdue U.				3		300 Participating	3
11/17/2006 and 11/20/2006	Fluid Flow at Tecumseh MS	1	1			20		1
11/21/2006	Cryogenic Temp Show St. Lawrence	1	3	60				
12/1/2006	Cryogenic Temp Show New Commun School	1	1	15				
12/7/2006	Cryogenic Temp Show Hershey Elementary	1	4	75				
12/8/2006	POTR Frankfort Middle School Frankfort	1	5	200				
12/11/2006	Classroom Visit: Density Tindley School	1	1				60 Participating	
12/21/2006	Cryogenic Temp Show Miller Elementary	1	3	75				1
TOTALS	13	12	48	625	4	560	496 Participating 70 Reached	9

After School Science Club: I worked with a Purdue physics graduate student and an undergraduate pre-service elementary teacher to establish an after-school science club at Happy Hollow Elementary School.

Date(s)	School(s) Visited	K-12 Students Participating	Purdue Grad Students Participating	Purdue Pre-service K-12 Teachers Participating
11/8-12/19/2006	1	25	1	1

Physics Department Tours: High School teachers who have been involved in the Purdue QuarkNet Center have brought their students for tours of the department and to show their students what they have been involved in.

Date(s)	School(s) Visiting	K-12 Teachers Reached	K-12 Students Reached
9/5/2006	1	1	15
10/27/2006	1	1	20

Discovery Learning Center Grant: Planning for The Impact of the Performing Arts for Science Learning. This semester was spent in organizing for the teacher/student participation during the Spring 2007 semester.

Date(s)	K-12 Personnel Involved	University Staff Involved
9/1-12/31/2006	7	5

Service Learning and Undergraduate Participation

- Physics 290M: Service Learning Outreach allows Purdue undergraduate students, both from physics and outside CoS, to participate according to their educational plans. Physics majors worked on the Cosmic Ray Detector project through the Purdue QuarkNet Center that is an effort to build a detector and data collection explorations that will eventually be taken to high school classrooms of teachers participating in the QuarkNet program. Pre-service teachers participated in classroom visits and Physics on the Road events.
- Physics 290S: Physics Outreach Assistance allows students to enter the class throughout the semester, usually after they drop a course and need to pick up a course to maintain full-time status. Students assist with events such as preparation of materials for Physics on the Road and classroom visits. To the extent that their schedules allow, students may accompany the outreach coordinator to events and help present.

Date(s)	Physics 290M students participating	Physics 290S students participating
9/1-12/19/2006	3	3

Departmental Outreach

- Professor Lynn Bryan worked with teachers from Gary Schools under a grant offered to physics from the IN DOE. Dr. Bryan provided professional development that the participating teachers then took to their students.

Date(s)	K-12 Teachers Participating	K-12 Students Participating
Fall, 2006	4	100