

## Physics Day at Lagoon 2005

The sixteenth annual Utah State University Physics Day at Lagoon was held on May 20. This year Idaho National Lab (INL) and the USU Physics Department teamed to coordinate and run the event. There were approximately 6139 students and 348 teachers from 93 schools in four states [Utah, Idaho, Nevada and Wyoming] who attended. The big change this year was the addition of the new Sky Ride contest. It was successful beyond our wildest expectations, with 992 students participating!. The most exciting development was a nearly 100% increase in the number of students participating in our organized activities, with an estimated *2635 students participating!*

Event	High Schools	Middle Schools/ Junior High Schools
Physics Bowl	24 Teams, 72 Students	---
G-forces Contest	25 teams, 37 Students	34 teams, 136 Students
Demonstration Design Contest	55 Entries, 95 Students	43 Entries, 98 Students
Ride Design Contest	47 Entries, 112 Students	53 Entries, 94 Students
Logo Design Contest	119 Entries, 134 Students	195 Entries, 204 Students
Student Workbooks	9 Schools, 211 Students	13 Schools, 450 Students
Sky Ride Contest	24 Schools, 397 Students	27 Schools, 595 Students
Total Contest Participation	1058 (~46%) Participants	1577 (~41%) Participants
Totals Registered (Numbers in the table reflect actual registration. We estimate that ~20% of those participating in contests did not complete registration on Physics Day.)	43 Schools 142 Teachers ~2312 Students	50 Schools 206 Teachers ~3827 Students

About eighty faculty, staff, and students from the USU Physics Department, four INL staff, and about sixty additional judges and helpers other sponsoring agencies were on hand to assist with registration, organization and contest judging. The number of sponsor displays continues to grow in both number and ability to impress the students. There were an estimated ***\$60,000 in prizes awarded this year.*** The top twelve students of the Physics Bowl were offered ***four year scholarships to USU*** by the USU Office of Recruitment and Enrollments Services. An additional scholarship for a participating student from the Idaho Falls area was sponsored by Marie Putnam. Sponsors included, Boeing, Idaho NASA Space Grant Consortium, Lagoon, Mathsoft Engineering & Education, Micron, Marie Putnam, Rocky Mountain NASA Space Grant Consortium, Thiokol, USU College of Science, and USU Office of Recruitment and Enrollments Services.

Television coverage from KSL and Ch. 4 in Salt Lake City provided very nice spots on the evening news of the event. The Deseret News and the Ogden Standard Examiner also had nice stories to cover the event.

**Summary of Prizes awarded:**

Sponsor	Items	Quantity Awarded	Unit Price	Total Dollar Value
Lagoon	Season Passes	20	\$81.95	\$1,639.00
Lagoon	Day Passes	250	\$31.95	\$7,987.50
Idaho NASA Space Grant Consortium	T-shirts	30	\$8.00	\$240.00
Thiokol	Highlighters, etc	200	\$2.00 *	\$400.00
INL	Calculators, etc.	100	\$5.00 *	\$500.00
INL	T-shirts, etc.	20	\$10.00 *	\$200.00
USU High School Relations	Four Year Scholarship	3	\$14,224.68	\$42,673.86
Marie Putnam	Idaho Falls Scholarship	1	\$1000.00 #	\$1,000.00
USU College of Science, RMNSGC, Thiokol, Boeing, INSGC, INEEL	T-shirts	525		\$1,943.66
USU College of Science, RMNSGC, Thiokol, Boeing, INSGC, INEEL	Purchased Prizes			\$2,751.98
<b>Total Prizes</b>				<b>\$59,336.00</b>

\* Estimated value.

# Committed.

**Summary of Purchased Prizes**

Number	Item	Vendor	Date	Cost
1	Demonstration items	Edmund Scientific	6/05	\$226.35
2	Demonstration Items	Educational Innovations	4/05	\$1,342.86
3	T-Shirts	Ye Ole Shirt Shop	5/05	\$1,943.66
4	Prizes	USU Journal Entry	6/05	\$93.12
5	Prizes	Smith's	5/05	\$95.45
6	Prizes	Westmintser	4/05	\$804.12
7	Prizes	Pasco	6/05	\$190.08
	<b>Total Purchased Prizes</b>			<b>\$4,695.64</b>

# Not yet spent.

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### Summary of Sponsor Cash Contributions

Number	Item	Source	Date	Income
1	Contribution for prizes	USU College of Science	2/05	\$500.00
2	Contribution for t-shirts	Boeing Corp.	5/05	\$1000.00
3	Contribution for prizes	Idaho NSGC	*	\$500.00
4	Contribution for prizes	RMNSGC	4/05	\$400.00
6	Contribution for prizes	INL	6/05	\$300.00
7	Contribution for prizes	Thiokol	4/05	\$500.00
8	Contribution for prizes	Micron	5/05	\$2,000.00
9	Contribution for prizes	Anonymous Donor	6/05	\$2,000.00
10	Contribution for prizes	SAIC	6/05	\$500.00
	Total Cash Contributions			\$7,700.00

\* Support committed, but not yet received. Support for 2004 was received 12/04.

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# ***PHYSICS DAY AT LAGOON 2005***

## ***SCHOOL PRIZES***

### **FIRST PLACE**

#### **Teachers**

2 Kick Disk Power Pucks  
Lagoon Day Pass  
2005 Physics Day T-Shirt

#### **Students**

3" Plasma Globe  
Buzz Magnet  
Lagoon Day Pass  
2005 Physics Day T-Shirt

### **SECOND PLACE**

#### **Teachers**

Nightstar Flashlight  
Hand Held DC Generator  
Buzz Magnets  
Lagoon Day Pass  
2005 Physics Day T-Shirt

#### **Students**

Cosmic Rings  
Buzz Magnet  
Lagoon Day Pass  
2005 Physics Day T-Shirt

### **THIRD PLACE**

#### **Teachers**

Gyro Ring  
2 Rattlebacks  
Flip 'n Flyer  
Lagoon Day Pass  
2005 Physics Day T-Shirt

#### **Students**

Newton's Cradle  
Buzz Magnet  
Lagoon Day Pass  
2005 Physics Day T-Shirt

# ***PHYSICS DAY AT LAGOON 2005***

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# ***PRIZES FOR STUDENT WORKBOOKS***

***STUDENTS SUBMITTING STUDENT  
WORKBOOKS WILL RECEIVE AN  
OPPORTUNITY TO PARTICIPATE IN A RANDOM  
DRAWING***

***HUNDREDS OF PRIZES INCLUDE***

***10 SEASON PASSES TO LAGOON***

***25 DAY PASSES TO LAGOON***

***OTHER GREAT PRIZES***

and

***Candy for Every Entry!!!***

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UTAH STATE UNIVERSITY  
PHYSICS DAY at LAGOON

CONTEST WINNERS (2004)

PHYSICS BOWL

First Place:

Layton High School  
James Lindsay, Advisor  
Layton, UT 84041

Justin Messenger  
Layton, UT 84040

Jon Holbrook  
Layton, UT 84040

Chad Chavez  
Layton, UT 84041

Second Place:

Hillcrest High School  
Randy Waite  
Ammon, ID 83406

Ryan Norman  
Idaho Falls, ID 83406

Lisa Pfof  
Idaho Falls, ID 83406

Rich Wilson  
Idaho Falls, ID 83406

Third Place:

Riverton High School  
, Advisor

Lyle Cox

Kevin Eggett

Neil Hinckley

Fourth Place:

Lone Peak High School

Bryson Gregory

Benji Parker

Ryan Himmighoefer

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**PHYSICS DEMONSTRATION DESIGN CONTEST**  
**HIGH SCHOOL DIVISION**

**First Place:**

Cyprus High School  
Anne Beus, Advisor  
Magna, UT 84094

Tina Nguyen  
Tasha Olson  
Pablo Alvarez  
Kyna Mace

**Second Place:**

Lone Peak High School  
Tom Erikson, Advisor

Highland, uT 84003

Jeff Thompson  
Bryson Gregory  
Eli Ashby

**Third Place:**

Hillcrest High School  
Randy Waite, Advisor  
Idaho Falls, ID 83406

Timothy A. Barnes

**PHYSICS DEMONSTRATION DESIGN CONTEST**  
**MIDDLE/JUNIOR HIGH SCHOOL DIVISION**

**First Place:**

Kaysville Junior High School  
Mark Tolman, Advisor  
Kaysville, UT 84037

Jake Jensen

**Second Place:**

Kaysville Junior High School

Mark Tolman, Advisor  
Kaysville, UT 84037

Karlianne Gelter

**Third Place:**

Kaysville Junior High  
Mark Tolman, Advisor  
Kaysville, UT 84037

Kristyn Clark

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**RIDE DESIGN CONTEST**  
**HIGH SCHOOL DIVISION**

**First Place:**

Hillcrest High School  
Randy Waite, Advisor  
Idaho Falls, ID 83406

“Roller Coaster Design”

Cort Pincock  
Jenn Cook

“Airborne: The Maglev Hover  
Coaster of Tomorrow:

Timothy A. Bernes

**Third Place:**

Cyprus High School  
Anne Beus, Advisor  
Magna, UT 84044

**Second Place:**

Hillcrest High School  
Randy Waite, Advisor  
Idaho Falls, ID 83406

“Test Run”

Nayeli Gomez  
Dustin Lyon  
Jessica Barton  
Thuy Nguyen

**RIDE DESIGN CONTEST**  
**MIDDLE/JUNIOR HIGH SCHOOL DIVISION**

**First Place:**

Kaysville Junior High School  
Mark Tolman, Advisor  
Kaysville, UT 843037

**Third Place:**

Kaysville Junior High School  
Mark Tolman, Advisor  
Kaysville, UT 843037

“Super Nova Aftermath”

Marcie Wallace

“Raging Monkey”

Ben Meyers

**Second Place:**

Bountiful Junior High School  
Gail Ballew & Matt Smith, Advisors  
Salt Lake City, UT 84117

“Swirling Rapids”

Matt Parkin  
Heather Jones  
Candice Thomas  
Andrea Downie



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**LOGO DESIGN CONTEST**  
**HIGH SCHOOL DIVISION**

**First Place:**

Lone Peak High School  
Tom Erekson, Advisor  
Highland, UT 84003

Nathan Bonham

**Second Place:**

American Falls High School  
Sandy Powell, Advisor  
American Falls, ID 83211

Rebecca Flores  
Denise Hernandez

**Third Place:**

Box Elder High School  
Katie Geldmacher, Advisor  
Brigham City, UT 84302

Brenden Oliva

**LOGO DESIGN CONTEST**  
**MIDDLE/JUNIOR HIGH SCHOOL DIVISION**

**First Place:**

Kaysville Junior High School  
Mark Tolman, Advisor  
Kaysville, UT 84037

Parker Flood

**Second Place:**

Kaysville Junior High School  
Mark Tolman, Advisor

Kaysville, UT 84037

Mitchell Eller

**Third Place:**

Bountiful Junior High School  
B. Ballew and M. Smith, Advisors  
Salt Lake City, UT 84117

Jessie Kagie

**CURRICULUM DEVELOPMENT CONTEST**

**First Place:**

Ron Cefalo  
Box Elder High School  
Brigham City, UT 84302

“It’s About Time”

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**COLOSSUS' COLOSSAL G-FORCES CONTEST**  
**HIGH SCHOOL DIVISION**

**First Place:**

Malad High School  
Lucinda Bingham, Advisor  
Malad, ID 83252

Gayla Bennett  
Ivy Wang  
Mattie Jones

**Second Place:**

Hillcrest High School

Randy Waite, Advisor  
Idaho Falls, ID 83406

Richard Wilson

**Third Place:**

Hillcrest High School  
Randy Waite, Advisor  
Idaho Falls, ID 83406

Jenn Cook  
Ryan Norman

**COLOSSUS' COLOSSAL G-FORCES CONTEST**  
**MIDDLE/JUNIOR HIGH SCHOOL DIVISION**

**First Place:**

Churchill Junior High School  
Brian Lestarge, Advisor  
Salt Lake City, UT 84104

Gary Higgs  
Taylor Parkin  
Nate Rhoner  
Brandon Beam

**Second Place:**

Burley Junior High School  
Carrie Carson, Advisor

Chris Hogan  
Josh Hedges

**Third Place:**

San Rafael Junior high School  
Barry Bishop, Advisor  
Ferron, UT

Jeff Gordon

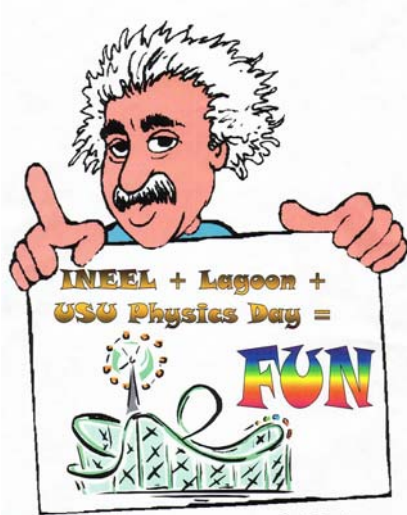
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# 2005 Logo Contest Winners

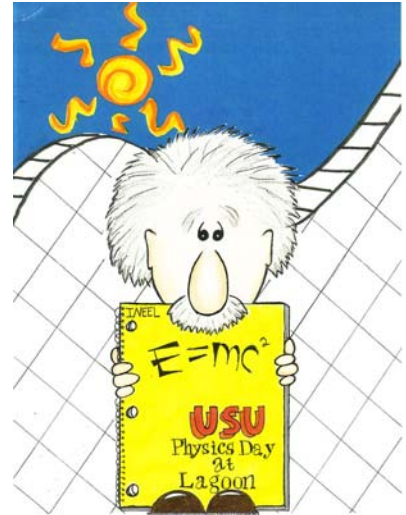
## High School Winners



First Place  
Julie Ryerse  
Viewmont High School  
Tom Ereksen, Advisor

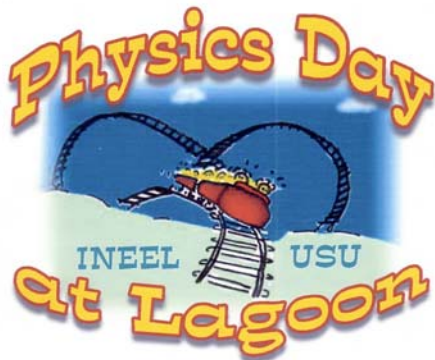


Second Place  
Catalyn Cummins  
Layton High School  
Sandy Powell, Advisor

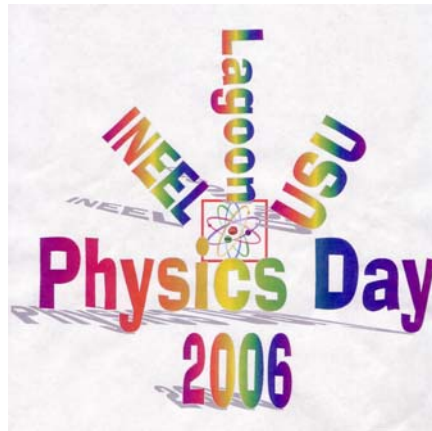


Third Place  
Kathryn Andersen  
Box Elder High School  
Katie Geldmacher, Advisor

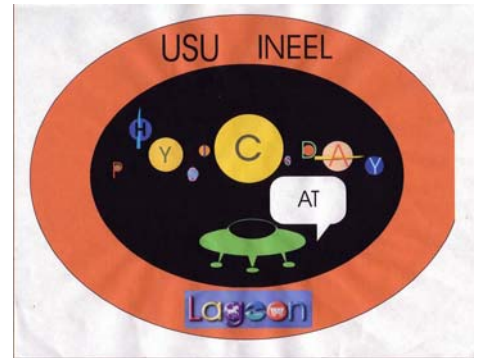
## Middle School Winners



First Place  
Rachel Pearce  
Kaysville Junior High School  
Mark Tolman, Advisor



Second Place  
Lindsy Hall  
Kaysville Junior High School  
Mark Tolman, Advisor



Third Place  
Forrest Slade  
Kaysville Junior High School  
Mark Tolman, Advisor