

## Physics Day at Lagoon 2004

The fifteenth annual Utah State University Physics Day at Lagoon was held on May 14. This year Idaho National Engineering and Energy Lab (INEEL) and the USU Physics Department teamed to coordinate and run the event. There were approximately 5705 students and 341 teachers from 102 schools in four states [Utah, Idaho, Nevada and Wyoming] who attended. A revamped web site [ <http://physics.usu.edu/> ] included on-line registration and substantially enhanced information and curriculum materials for teachers.

Event	High Schools	Middle Schools/ Junior High Schools
Physics Bowl	24 Teams, 72 Students	---
G-forces Contest	28 teams, 57 Students	29 teams, 84 Students
Demonstration Design Contest	31 Entries, 68 Students	27 Entries, 72 Students
Ride Design Contest	37 Entries, 90 Students	34 Entries, 74 Students
Logo Design Contest	119 Entries, 134 Students	195 Entries, 204 Students
Student Workbooks	9 Schools, 211 Students	13 Schools, 450 Students
Total Contest Participation	532 (~38%) Participants	884(~55%) 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.)	38 Schools 93 Teachers ~1394 Students	41 Schools 123 Teachers ~1614 Students

About eighty faculty, staff, and students from the USU Physics Department, about a five INEEL staff, and about sixty additional 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 **\$56,000 in prizes awarded this year**. Three **four year scholarships to USU** were awarded by the USU Office of Recruitment and Enrollments Services. Sponsors included Argonne National Laboratory – West, Boeing, Idaho NASA Space Grant Consortium, Lagoon, Mathsoft Engineering & Education, Moog Aircraft Group, NitroCision, Marie Putnam, Rocky Mountain NASA Space Grant Consortium, Thiokol, TRUTech, US Navy, USU College of Science, and USU Office of Recruitment and Enrollments Services, Ron and Susan Warnecke. Four new sponsors joined our ranks this year, NitroCision, Marie Putnam, TRUTech, and Ron and Susan Warnecke.

Television coverage from Ch. 4 in Salt Lake City provided a very nice spot on the evening news of the event. 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	200	\$30.95	\$6,190.00
Idaho NASA Space Grant Consortium	T-shirts	59	\$8.00	\$472.00
Thiokol	Highlighters, etc	200	\$2.00	\$400.00*
INEEL	Calculators	100	\$5.00	\$500.00*
INEEL	T-shirts, etc.	50	\$10.00	\$200.00*
US Navy	Waterbottles, etc.	200	\$0.50	\$100.00*
USU High School Relations	Four Year Scholarship	3	\$14,224.68	\$42,673.86
USU College of Science, RMNSGC, Thiokol, Boeing, INSGC, INEEL	T-shirts	445		\$1,489.66
USU College of Science, RMNSGC, Thiokol, Boeing, INSGC, INEEL	Purchased Prizes		\$2,178.60	\$2,382.49
<b>Total Prizes</b>				<b>\$56,046.35</b>

\* Estimated value.

**Summary of Purchased Prizes**

Number	Item	Vendor	Date	Cost
1	Demonstration items (M677705)	Arbor Scientific		\$110.49
2	Prizes (M677691)	Scientifics		\$70.10
3	Demonstration Items	Educational Innovations		\$259.93
4	Books (A271350, A271352)	Amazon.com		\$930.69
5	Supplies (Tanya)	PDP		\$16.43
6	T-Shirts (R266768)	Ye Ole Shirt Shop		\$1,489.66
7	Prizes (M677693)	Tower Hobbies		\$445.77
8	Prizes (M677705)	PASCO		\$130.50
9	Prizes (R271355)			\$118.81
10	Prizes (M680716)	Magical Moon Toys		\$49.98
11	Prizes (M680715)	Magical Moon Toys		\$249.79
	Prizes SubTotal			\$3,872.15
12	Posters (M680713)	Kinko's		\$82.70
13	Accelerometer (M677699)	Pasco		\$333.20
14	Supplies	Cash		\$16.99
15	Supplies	Cash		\$33.92
16	Web Site development	USU Physics		\$300.00#
17	Letterhead and envelops	USU Physics		\$0.00
18	Postage	USU Physics		\$0.00
19	Transportation to Physics Day	USU Physics		\$84.00
	Other USU Expenses Sub Total			\$850.81
	Total Expenses			\$4,722.96

# Not yet spent.

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# ***PHYSICS DAY AT LAGOON 2004 MIDDLE SCHOOL PRIZES***

## **FIRST PLACE**

### **Teachers**

K'Nex Kit  
Science Book  
Lagoon Day Pass  
2004 Physics Day T-Shirt

### **Students**

K'Nex Kit  
Lagoon Day Pass  
2004 Physics Day T-Shirt

## **SECOND PLACE**

### **Teachers**

Power Puck  
Snakey Pendant  
Lagoon Day Pass  
2004 Physics Day T-Shirt

### **Students**

Science Book  
Hobermann Microsphere  
Lagoon Day Pass  
2004 Physics Day T-Shirt

## **THIRD PLACE**

### **Teachers**

Mega Magnet Book  
Two Super Magnets  
Lagoon Day Pass  
2004 Physics Day T-Shirt

### **Students**

Hobermann Microsphere  
Flip Over Buggy  
Lagoon Day Pass  
2004 Physics Day T-Shirt

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# **PHYSICS DAY AT LAGOON 2004**

## **HIGH SCHOOL PRIZES**

### FIRST PLACE

#### Teachers

K'Nex Kit  
Science Book  
Lagoon Day Pass  
2004 Physics Day T-Shirt

#### Students

GeoMag Demonstration  
Lagoon Day Pass  
2004 Physics Day T-Shirt

*In Addition Each Member of the Winning Physics Bowl Team will Receive a **Four Year Scholarship** To Utah State University*

### SECOND PLACE

#### Teachers

Power Puck  
Snakey Pendant  
Lagoon Day Pass  
2004 Physics Day T-Shirt

#### Students

Science Book  
Hobermann Microsphere  
Lagoon Day Pass  
2004 Physics Day T-Shirt

### THIRD PLACE

#### Teachers

Mega Magnet Book  
Two Super Magnets  
Lagoon Day Pass  
2004 Physics Day T-Shirt

#### Students

Magic Pendulum  
Lagoon Day Pass  
2004 Physics Day T-Shirt

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# ***PHYSICS DAY AT LAGOON 2004***

## ***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***

***100 SPACE POSTERS***

*and much more...*

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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

**Third Place:**

Riverton High School  
, Advisor

Lyle Cox

Kevin Eggett

Neil Hinckley

**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

**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

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

**Third Place:**

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

**First Place:**

Lone Peak High School  
Tom Ereksen, 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

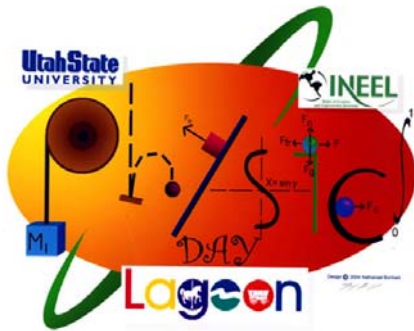
**Third Place:**

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

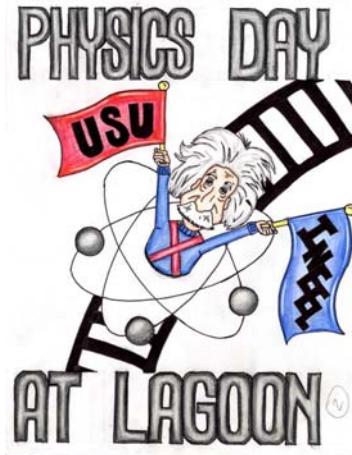
Jeff Gordon

# 2004 Logo Contest Winners

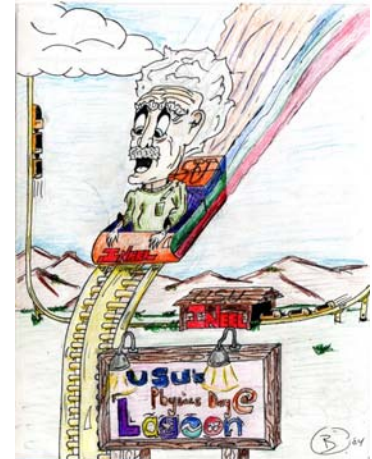
## High School Winners



First Place  
Nathan Bonham  
Lone Peak High School  
Tom Erikson, Advisor

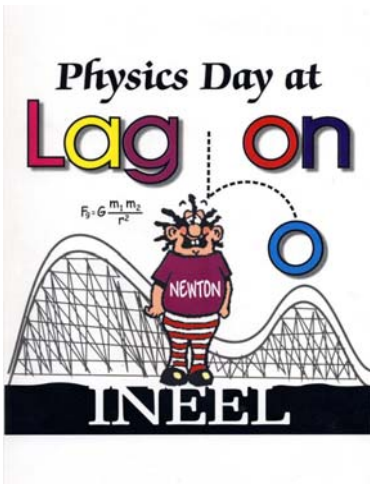


Second Place  
Rebecca Flores & Denise Hernandez  
American Falls High School  
Sandy Powell, Advisor



Third Place  
Brenda Oliva  
Box Elder High School  
Katie Geldmacher, Advisor

## Middle School Winners



First Place  
Parker Flood  
Kaysville Junior High School  
Mark Tolman, Advisor



Second Place  
Mitchell Eller  
Kaysville Junior High School  
Mark Tolman, Advisor



Third Place  
Jessie Kagie  
Bountiful Junior High  
B. Ballew and M. Smith, Advisor