

"All The v's That's Fit  
To Print"

# ΦYAST ΦLYER

*The Homer L. Dodge Department of Physics and Astronomy  
The University of Oklahoma*

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## **BRUCE MASON RECEIVES LONGMIRE PRIZE FOR GOOD TEACHING**

Associate Professor Bruce Mason was awarded the Longmire Prize for teaching at the April 7 colloquium of the Teaching Scholars Initiative held at the National Weather Center on the south end of campus. The Longmire Prize is awarded annually to individuals like Bruce who are not only recognized as excellent teachers, but who also are contributing to the scholarship of teaching through research. The award is made by the College of Arts and Sciences and is named for the late William and Jane Longmire who established the fund in order to improve teaching at OU. Bruce received a monetary award and a plaque. In addition, his name will be inscribed on a permanent plaque in Ellison Hall, the home of the College.



But wait, there's more! Bruce has also recently received the MERLOT Distinguished Teaching Award, an OU Good Teaching Award, and Regent's Award for Superior Teaching. Bruce serves as editor of the MERLOT Physics discipline. MERLOT's mission is "putting educational innovations into practice." You can read all about it at <http://www.merlot.org/merlot/index.htm>

Bruce's guiding principle is "physics is not a spectator sport." Therefore, most of what he does in the classroom is aimed at getting students involved in the discussion through the use of apples, animation, and Socratic methods. Comments from students on his teaching describe his easy manner and dry humor, down-to-earth explanations and an "I'm on your side" attitude. Bruce is pictured nearby relaxing in his office after an exhausting dialogue with Socrates about teaching methods.

## TED WEBB (1930-2008)

Ted Webb (BS Physics, 1951), a former vice president of General Dynamics, one-time head of engineering on the F-16 program, and strong supporter of our Department, died at his home in Fort Worth, TX, on January 15, following a long illness. Mr. Webb was 77.

*The Cuba and Ted Webb Scholarship* was established in the Department in 1997 by Mr. Webb and his wife through a generous gift. The \$1500 scholarship is presented annually to an outstanding upper-division undergraduate student majoring in astronomy, astrophysics, physics or engineering physics on the basis of merit and need. In addition, the couple endowed an OU Presidential Professorship in their name.

## HOMER L. DODGE PROFESSOR OF HIGH ENERGY PHYSICS: HOWIE BAER

by Phil Gutierrez



The Homer L. Dodge chair in high energy physics has now been filled by Howard (Howie) Baer, a high energy phenomenologist whose most recent position was as a J.D. Kimbel Professor of Physics at Florida State University. Howie received his Ph.D. in physics from the University of Wisconsin at Madison under the supervision of Professor Vernon Barger in 1984. Howie is one of the world's experts on the phenomenology of supersymmetry at hadron and linear colliders. He has authored over 140 peer reviewed articles and co-wrote a book with Xerxes Tata entitled "Weak Scale Supersymmetry: From Superfields to Scattering Events". Howie's expertise in collider physics will be of great value during the startup of the Large Hadron Collider later this year at CERN; he will provide the high energy experimentalist with valuable insights into methods of analyzing the collected data. Howie's research interests also overlap Chung Kao's work in collider phenomenology as well as those of certain members of the astrophysics group studying dark matter (he recently chaired the theory subgroup of the Dark Matter Assessment Group). In addition to his research, Howie brings a significant amount of teaching experience to OU. He has taught courses at all levels, from introductory physics and astronomy to advanced level graduate courses in particle physics, quantum field theory and general relativity. Howie and his wife Adrienne have two children, Madeleine and Jacob. He enjoys the outdoors, maintaining a cabin near Eau Claire, Wisconsin.

## SUMMER 2008 REU STUDENTS

This summer's participants in the NSF sponsored Research Experience for Undergraduates began their two-month research program during the week of June 2. The program, which is locally managed by Kieran Mullen and Eric Abraham, has attracted many talented undergraduates in physics and astronomy to OU from around the country to work closely with some of our faculty in their research. The opportunity is designed to give budding scientists a first hand look at scientific enquiry, both experimental and theoretical in nature. Besides the welcomed assistance in faculty research, an added benefit of the REU program is that often some of these students will eventually return to OU to become a part of our graduate program. Listed below are this year's REU participants.

**Non-OU Students**

<i>Student</i>	<i>Field</i>	<i>Mentor</i>	<i>Funding source</i>
Dupre, William	TAM	Parker	Old NSF grant
Grotewohl, Herbert	E/TAM	Jim	Old NSF grant
Schwartz, Jeffrey	ECM	Johnson/Bumm	Old/New NSF
Hennenberg, Linda	Astro/Any	Baron	Old/New NSF
Herrerra, Brianne	HEP	Kantowski	Old/New NSF
Kaplan, Steven	EPP	Abbott	Old/New NSF
Samuels, Margret	CMP	Johnson	Old/New NSF

**OU Students**

Andrew Santos	CMP	Santos	Old Provost Match
Sara Barber	Astro	Romanishin	EPSCoR
Alea Smith	Astro	Romanishin	New Match
John Mitchell	High Energy	Kao	New Match
Ernie Sanchez	CMP	Johnson	New Match
Kevin Perot	Astro	Leighly	Leighly Funds
Caddel, John	ECM	Murphy	Santos Funds
James, Spencer	Astro	Baron	
Gaylord, Trey	CMP	Johnson	Old NSF

## **UNDERGRADUATES RECEIVE DESERVED RECOGNITION**

The Department is justifiably proud of many of our talented undergraduate majors in physics, astrophysics, or engineering physics. Each year we set aside the last Thursday in the academic year to honor those individuals who have distinguished themselves academic. This year's program took place on Thursday, May 1. Awards in Physics & Astronomy were presented by Prof. Sheena Murphy, while the Engineering Physics awards were handed out by Prof. Mike Santos. Of course Chair Ryan Doezema opened the event with a couple of jokes, something we all look forward to each year.

The list of recognized students along with their awards and majors are listed below (thanks to Stu Ryan for compiling the list). Just think of the number of homework problems tussled with that each name represents! Congratulations to each of these students for making us look like we know what we're doing.

### College of Engineering

Outstanding Senior in COE

First Name	Last Name
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Michael	Meier
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### Homer L Dodge - Departmental Prizes

Fowler Prize (Graduating Senior)

Dodge Prize-Junior Year

Dodge Prize-Sophomore Year

Dodge Prize-Sophomore Year

Susan Marie	Gosse
Jonathan Lyn	Caddell
Christopher Alan	Schroeder
Matthew Robert	Whiteway

### Physics & Astronomy Awards

J Clarence Karcher Award

Duane E. Roller Award

Outstanding Scholarship by a Graduating Senior

Outstanding Scholarship by a Graduating Senior

Daniel Robert	White
Christopher David	Krycho
Ethan William	Brown
Jason Bradley	Garman

### Physics & Astronomy Scholarships

Cuba & Ted Webb Scholarship

J Clarence Karcher Scholarship

J Clarence Karcher Scholarship

J Clarence Karcher Scholarship

J Clarence Karcher Scholarship

Leah Elizabeth M	Trafford
Sara Diann	Barber
Daniel Ross	Freno
Joe Dan	Mitchell
Matthew Robert	Whiteway

### Physics & Astronomy Recognition

Meritorious Scholarship

Meritorious Scholarship

Meritorious Scholarship

Meritorious Scholarship

Meritorious Scholarship

Meritorious Scholarship

Meritorious Scholarship

Meritorious Scholarship

Doosan	Back
Amanda Gray	Baldwin
Henry Len	Bradsher
Cynthia Erin	Brown
Ethan William	Brown
Dustin P	Clouse
Dustin Clark	Combs
Darren Wade	Erdman

Meritorious Scholarship

Meritorious Scholarship

Meritorious Scholarship

Meritorious Scholarship

Meritorious Scholarship

Meritorious Scholarship

Meritorious Scholarship

Meritorious Scholarship

Meritorious Scholarship

Meritorious Scholarship

Meritorious Scholarship

Meritorious Scholarship

Meritorious Scholarship

Jason Bradley	Garman
Andre Markus	Goran
Susan Marie	Gosse
Michael	Haas
Nuria	Hirsch
Mary Catherine	Hogan
Jim A	Hopkins
Eric Anthony	Imhof
Spencer Dana	James
David William	Kelle
Christopher David	Krycho
Virginia Lee	Lambert
Jessica Mary-Inez	Mackiewicz

Meritorious Scholarship  
Meritorious Scholarship  
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Meritorious Scholarship

Kevin Orion  
Christopher Alan  
Jonathan Conley  
Christina Marie  
Michael S  
Adam Roger  
Alea Dawn  
Joshua Scott  
Daniel William  
Amanda Rosendall  
Daniel Robert

Perot  
Schroeder  
Sharp  
Shultz  
Silagi  
Smialek  
Smith  
Smith  
Solow  
Truitt  
White

### **Engineering Physics Awards**

J Clarence Karcher Award  
Duane E. Roller Award  
William Schreiver Award  
Outstanding Scholarship by a Graduating Senior

Ryan  
Andrew Martin  
Joshua Kyle  
Eric Laurence

Smith  
Santos  
Reid  
Johnson

### **Engineering Scholarships Engineering Physics**

Roy B. Adams Scholarship  
Roy B. Adams Scholarship  
Homer L. Dodge Scholarship  
J Clarence Karcher Scholarship  
J Clarence Karcher Scholarship  
J Clarence Karcher Scholarship  
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J Clarence Karcher Scholarship

Christian J  
Ernest Serapio  
Bryce Matthew  
Christopher Edward  
Zachary Thomas  
Cale Michael  
Robert Andrew  
Brian Joseph  
John Philip  
Joshua Kyle

Crowe  
Sanchez  
Callies  
Allen  
Dunn  
Gentry  
Mc Clure Jr  
Morris  
Mueller  
Reid

Andrew Martin  
Jared Allen

Santos  
Seay

### **Engineering Physics Recognition**

Meritorious Scholarship  
Meritorious Scholarship  
Meritorious Scholarship  
Meritorious Scholarship  
Meritorious Scholarship  
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Meritorious Scholarship  
Meritorious Scholarship

Benjamin Nichols  
Bruce Bennett  
Aaron Edward  
Jonathan Lyn  
Christopher Brian  
Robert Douglas  
Abraham John  
Stephen Phillip  
Mitchell Andrew  
Eric Laurence  
Michael

Abner  
Bacon Jr  
Browder  
Caddell  
Frantze  
Free  
Frei-Pearson  
Glenn  
Greer  
Johnson  
Meier

Meritorious Scholarship  
Meritorious Scholarship  
Meritorious Scholarship  
Meritorious Scholarship  
Meritorious Scholarship  
Meritorious Scholarship  
Meritorious Scholarship

Kelly Louise  
Ricardo Hiroshi  
Cody Wade  
Ryan  
Alan Thomas  
Richard James  
Jeffrey Scott

O'Roke  
Patino  
Piersall  
Smith  
Taylor  
Welch  
Woidke

## BITS FROM NIELSEN HALL NETWORK

by Andy Feldt

A perusal of our archive of newsletters shows that it has been eight years since we have written about our computing environment. I think this is a sign of the stability of current hardware and software which has allowed our computers and network to simply run very smoothly a very high percentage of the time.



The downside of this stability is the fact that, until recently, there has been no push to obtain newer equipment so that most of our research computers are now quite aged. We have had two of our oldest Sun Ultras fail in the span of a month recently. On the bright side, we are now beginning to support Intel architecture systems running Red Hat Enterprise Linux (currently version 5.1) and a few brave souls have bought systems of this sort so that we can experiment with managing this new operating system.

Also, since our last report, Eddie Baron and Karen Leighly have obtained a 32 processor Apple cluster and the HEP group has installed two Linux clusters totaling over fifty processors.

For those who like numbers, a few are given here:

- 32 - Sun workstations on NHN
- 42 - total workstations on NHN
- 340 - IP addresses assigned on our subnet
- 1 - terabytes of backed up data
- 20000 - e-mails/day initiating connection
- 1000 - e-mails/day actually delivered after filtering
- 20000 - hits/day to our web server
- 2 - gigabytes/day served by our web server

expression.

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