Student Honors & Awards

(UNDERGRADUATE)

2012 Malcolm Cotton Brown Award

Emily Davis SB ’12
Thesis supervisor: Nergis Mavalvala

Vinay Ramasesh ’SB 12
Thesis supervisor: Martin Zwierlein
Awarded to a senior of high academic standing in physics who plans to pursue graduate study in experimental physics. Given in memory of Lt. Malcolm Cotton Brown, Royal Air Force, who was killed in service on July 23, 1918. The fund currently provides a prize of $1,000.

2012 Burchard Scholars

P. Bryan Changala SB ’12, Physics & Chemistry
Anna Ho SB ’14
Elizabeth Toller SB ’14
The Burchard Scholars Program brings together distinguished members of the faculty and promising sophomores and juniors who have demonstrated excellence in some aspect of the humanities, arts, and social sciences, as well as in science and engineering. The Burchard Program format is a series of dinner-seminars held during the academic year to discuss topics of current research introduced by MIT faculty members. The Program is sponsored by the Dean’s Office, School of Humanities, Arts, and Social Sciences.
2012 Philip Morse Memorial Award
winner Longzhi Tan

2012 Philip Morse Memorial Award
Longzhi Tan SB ’12

Thesis supervisor: Jeff Gore
Awarded to a senior of high academic standing in physics who plans to pursue graduate study in physics. Given in memory of Philip Morse, MIT Professor of Physics, one of the renowned physicists of the 20th century, whose contributions spanned from basic physics to engineering. The fund currently provides a prize of $1,000.
2012 Joel Matthew Orloff Awards

Scholarship
   **John Ruszczynki** SB ’12
   Academic advisor: Isaac Chuang

Research
   **Jonathan Ng** SB ’12
   Thesis supervisor: Jan Egedal-Pedersen

Service
   **Yan Zhu** SB ’12
   Academic supervisor: Nergis Mavalvala

The Joel Matthew Orloff Awards were established by Dr. and Mrs. Daniel Orloff in memory of their son Joel, a physics major, who died in an automobile accident shortly after graduation from MIT in 1978. One thousand dollars is awarded to each of several physics majors in the following three categories:

**Scholarship**—given to the student with either the highest GPA in physics courses or, if a tie, the highest overall GPA.

**Research**—given to the student with the most outstanding senior thesis.

**Service**—given to the student with the most outstanding service to the Department, Institute, or community.
2012 Sigma Pi Sigma inductees

Daniel Bulmash  
Tucker Chan  
Hui Xiao Chao  
Emily Davis  
Zachary Fisher  
Ying-Yu Ho  
Matthew Houston  
Ryan Janish  
Dustin Katzin  
Gregory Lau  
Jonathan Ng  
Eleanor Phillips  
Vinay Ramasesh  
Mallika Randeria  
Thomas Roxlo  
John Ruszczynski  
Benjamin Steinhorn  
Longzhi Tan  
Chun-Kai Wang  
Yan Zhu

2012 Phi Beta Kappa inductees

Daniel Bulmash  
Tucker Chan  
Hui Xiao Chao  
Emily Davis  
Zachary Fisher  
Ying-Yu Ho  
Matthew Houston  
Ryan Janish  
Dustin Katzin  
Gregory Kang Lau  
Jonathan Ng  
Eleanor Phillips  
Vinay Ramasesh  
Mallika Randeria  
John Ruszczynski  
Benjamin Steinhorn  
Longzhi Tan  
Yan Zhu
Other Undergraduate Honors & Awards

P. Bryan Changala (SB ’12, Physics & Chemistry) and Nityan L. Nair (SB ’13) were named 2012 Barry M. Goldwater Scholars, a premier distinction for mathematics, science, and engineering undergraduates nationwide. Each four-year U. S. institution is permitted only four nominees, with the award based on academic merit. The scholarship, given annually to several hundred students by the Goldwater Foundation, provides $7,500 for each remaining year of college.

Taylor Jay (SB ’12. Thesis supervisor: Enectali Figueroa-Feliciano) was awarded a three-year National Science Foundation Graduate Research Fellowship as of Fall 2012.

Lauren Kuntz (SB ’13. Thesis supervisor: Martin Zwierlein) received the NCAA Elite 89 Award for Indoor Track and Field. The award is given to the student-athletes with the highest cumulative grade point average competing at the final site for each of the NCAA’s 89 championships. Lauren also was named to the 2012 Capital One Academic All-America Track & Field/Cross Country Team.

Cameron McCord (SB ’13, Physics & Nuclear Engineering) was awarded a 2012 Harry S. Truman Scholarship by the U. S. Treasury Department. Created by Congress in 1975, the award provides $30,000 for graduate study in preparation for careers in government or the non-profit sector.

Sabrina Gonzalez Pasterski (SB ’14. Thesis supervisor: Markus Klute) was named a “Lindau Nobel Young Researcher” and invited to attend the July 2012 Lindau Meeting of Nobel Laureates and Students in Lindau, Germany.

Stephen Serene (SB ’12) was named to the 2012 Capital One Academic All-America Track & Field/Cross Country Team.
2012 Alan Barrett Prize

**Renyu Hu** Astrophysics

Thesis supervisor: Sara Seager

The award, established by students, friends, relatives and colleagues of the late Professor Alan Barrett, honors his outstanding influence in the education of physicists and his fundamental contributions to the science and technology of astrophysics. A $1,000 prize is awarded annually to a senior undergraduate or graduate in Astrophysics.

2012 Henry Kendall Teaching Awards

The Kendall Awards are given semi-annually to graduate student Teaching Assistants (TAs), whose teaching work for the department is considered outstanding and beyond that which is expected of a good TA. The award carries a prize of $1,000.

**September 2011 Award Recipients**

- **Bryon Drury** (Center for Theoretical Physics. Thesis supervisor: Edward Farhi) “For excellent teaching of recitations and guest lectures in 8.311.”
- **Jinrong Lin** (Astrophysics. Thesis supervisor: Deepto Chakrabarty) “For being absolutely on top of everything in 8.022, including new problem sets and labs.”
- **Leo C. Stein** (Astrophysics. Thesis supervisor: Scott Hughes) “For outstanding teaching in 8.901, from Mathematica notebooks to a guest lecture.”

**February 2012 Award Recipients**

- **Tatiana Artemova** (Biophysics. Thesis supervisor: Jeff Gore) “For playing a huge role in the success of 8.591.”
- **Adrian Liu** (Astrophysics. Thesis supervisor: Max Tegmark) “For his excellent contributions over several semesters teaching quantum mechanics.”
- **David Mross** (Hard Condensed Matter Theory. Thesis supervisor: Senthil Todadri) “For going beyond the call of duty in 8.231.”
- **Anjan Soumyanarayanan** (Experimental Condensed Matter. Thesis supervisors: Jenny Hoffman, Young Lee) “For making the teaching team in his section of 8.01 the best ever.”
- **Phillip Zukin** (Astrophysics. Thesis supervisor: Edmund Bertschinger) “For being a terrific, smart, dedicated, and wise teacher in 8.02.”
The following graduate award recipients for the 2010-11 academic year were announced in September 2011. The winners of the 2011-12 awards will be published in the Fall 2013 issue of physics@mit.

2011 Buechner Student Teaching Prize
**Chester Chu** Hard Condensed Matter Theory
Thesis supervisors: Xiao-Gang Wen, Eric Heller (Harvard University)
Awarded to a graduate student for outstanding contributions to the educational program of the Department during the past academic year. The $1,500 prize was established in 1987 by the late Mrs. Christina Buechner in memory of her husband Prof. William Buechner, who served as Physics department head from 1962-67.

2011 Martin Deutsch Student Award
For Excellence in Experimental Physics
**Ariel Sommer** Atomic Physics
Thesis supervisor: Martin Zwierlein
Awarded to a graduate student in the mid-course of research for study in any area of physics, with preference given to experimental physics. The award was created in honor of Prof. Martin Deutsch’s outstanding contributions to Nuclear Physics as an educator and researcher and currently carries a prize of $1,000.

2011 Andrew M. Lockett III Memorial Fund Award
**Xie Chen** Quantum Information/Condensed Matter Theory
Thesis supervisors: Isaac Chuang, Xiao-Gang Wen
Awarded to a graduate student in theoretical physics, with preference given to students from Los Alamos, NM, and New Orleans, LA. The award currently carries a prize of $1,000. The award was established by Mrs. Lucille Lockett Stone in memory of her husband, Dr. Andrew M. Lockett, who received his PhD in physics from MIT in 1954.

2011 Sergio Vazquez Prize
**Francesco D’Eramo** Center for Theoretical Physics
Thesis supervisors: Hong Liu, Krishna Rajagopal, Jesse Thaler
**Mohammed Maghrabi** Center for Theoretical Physics / Soft Condensed Matter Theory
Thesis supervisors: Robert Jaffe, Mehran Kardar
Established in memory of Sergio Vazquez, a graduate student in the Center for Theoretical Physics who was killed in an automobile accident on April 1, 1990. $1000 to be awarded annually to a graduate student with preference for a student from an underrepresented sector of the population who had to overcome racial, physical or financial barriers.
Other Graduate Honors & Awards

Francesco D’Eramo (Center for Theoretical Physics. Thesis supervisors: Hong Liu, Krishna Rajagopal, Jesse Thaler) was selected by the University of California, Berkeley, for a 2012-2015 Miller Postdoctoral Fellowship.

Joshua Dillon (Astrophysics. Thesis supervisor: Max Tegmark) and Rebecca Levinson (Astrophysics. Thesis supervisor: Paul Schechter) received Graduate Student Awards to attend the July 2012 Lindau Meeting of Nobel Laureates and Students in Lindau, Germany.

Georgia Karagiorgi (Experimental High Energy Physics. Thesis supervisor: Janet Conrad) received the American Physical Society’s 2012 Mitsuyoshi Tanaka Dissertation Award in Experimental Particle Physics.

Mark Ku (Atomic Physics. Thesis supervisor: Martin Zwierlein) received the Best Experimental Paper Award from the DARPA Optical Lattice Emulator program.

Daniel Roberts (Center for Theoretical Physics) received a Fall 2011 Graduate Fellowship Award from the Fannie and John Hertz Foundation. Given to students judged to be “exceptionally talented and creative young innovators,” the fellowship provides an award of up to $250,000.

Leslie Rogers (Astrophysics. Thesis supervisor: Sara Seager) was one of 17 recipients nationwide to receive a 2012-2015 Hubble Postdoctoral Fellowship. Leslie will study super-Earth and sub-Neptune exoplanets with Prof. John Johnson at the California Institute of Technology.

Monika Schleier-Smith (Atomic Physics. Thesis supervisor: Vladan Vuletic) was one of three Hertz Fellows awarded a 2011 Thesis Prize for “most outstanding doctoral dissertation...for overall excellence and potential impact for application in the real world.”

Leo C. Stein (Astrophysics. Thesis supervisor: Scott Hughes) was one of 12 recipients nationwide to receive at 2012-2015 Einstein Postdoctoral Fellowship. Leo will be based at Cornell University, where he’ll continue his studies of black holes, the early Universe, and other systems that are potential probes of strong-field gravity.

Alex Zylstra (Plasma Physics. Thesis supervisor: Richard Petrasso) received a National Ignition Facility (NIF) Directorate Award from Lawrence Livermore National Laboratory for his work on proton spectroscopy of inertial confinement fusion implosions. Alex also earned the Best Student Poster Award at the 2012 NIF User Group Conference, February 2012.