

A NOBEL PRIZE WINNER AND OTHER COLLOQUIUM HIGHLIGHTS

For the second year in a row, a Nobel Prize winner gave us the honor and presented a colloquium in the Physics department. John Mather, who received the Nobel Prize in 2006 (together with George Smoot) for the discovery of the blackbody form and anisotropy of the cosmic microwave background radiation, gave us an overview of this work and what followed after that in his presentation entitled, *The History of the Universe from Beginning to End, and Observing with the James Webb Space Telescope*. During the visit, John met with a large number of faculty, students and even alumni. The visit was initiated through a contact made by one of our GAANN fellows, *Andrew Abraham*, who worked at the Goddard Space center in Summer 2013. Abraham graduated in May 2014 with his work on “*Particle Swarm Optimization of Low-Thrust trajectories from LEO to Earth-Moon Lagrange Point Orbits*“. He worked with Terry Hart, a former astronaut and now professor in Mechanical Engineering.

John Mather was not the only highlight during the Spring Colloquium series, which also included e.g.: talks by C. Quigg, the head of the



Theory group at FermiLab, M. Valentine, BS '97, now a Professor at UC Santa Barbara, and

From the Chair's Desk

The year went by fast and was filled with many events and other excitement. During various events, I have met with a good number of former students and other friends of the department. I have talked about our department, its current state and its vision. In that context, I'm often asked: *How can I help?* Not a trivial question but let me try to answer it here:

- (1) Stay in touch with the department. We love to hear about how our graduates are doing and how their education at Lehigh may have helped them to achieve their goals. We also like to hear about those instances, in which we failed.
- (2) Make a donation. Consider making a donation directly to the department to support student travel, student research, or some of the activities of our great student organizations.
- (3) Come and visit us. Our current students would love to meet you personally and profit from your experiences. In 2015, we would like to hold several events, for which we would like to invite some of our alumni to talk to our students on how to prepare themselves for a career after Lehigh. How should they prepare themselves to be successful in Industry, National Research Labs or in Academia? Interested? Send me a note !!!

Volkmar Dierolf

a group of Physics faculty who presented their view about the last 50 years of Physics at Lehigh. The fall series was dominated by a theme focussing on young scientist which included Ph.D alum, Liangcheng Zhou PhD '10, now at Princeton and a mini series with three female speakers, supported by the Lehigh NSF-ADVANCE program.



FACULTY HIGHLIGHTS

We welcome Paola Cereghetti, as a new Professor of Practice into our department. She has been an adjunct professor with us for many years and we are glad to have her with us in this expanded role. Paola Cereghetti earned her Ph.D. in physics from the ETH Zurich (Swiss Federal Institute of Technology) with a dissertation titled “*On the Dynamics of Glassy Phase States: An NMR Investigation.*” She also holds a master’s in Chinese Studies from the University of Pennsylvania, where she investigated colored Chinese materia medica produced over a period ranging from the Eastern Han dynasty to the Ming dynasty. Paola’s present interests include the development of teaching material for non-major students in physics, as well as a curriculum that interweaves the teaching of physics concepts with the history of science.



Ivan Biaggio has published a major paper with P. Irkhin on “Two-photon absorption spectroscopy of rubrene single crystals,” *Phys. Rev. B* 89, 201202(R) (2014), and he secured support for this research from NSF. During a sabbatical stay at USTC in China he developed new ties with this institution that he plans to exploit in future years. Utilizing a visiting professor invitation in France, he worked on nonlinear frequency conversion in parallel waveguides and discovered a new method for achieving very high efficiencies (*Phys. Rev. A* 90, 043816).

A 2011 paper co-authored by Volkmar Dierolf on *Approaches for high internal quantum efficiency green InGaN light-emitting diodes with large overlap quantum wells* has been recognized in January 2014 as one of the most cited papers in Physics during the months of May and June 2013. This paper is in exclusive company with two papers that report the discovery Higgs Boson. In July 2014, Dierolf was appointed as a

University Distinguished Professor endowed by the Annual Giving Fund.

John Huennekens and Peet Hickman were successful in landing a new NSF grant that enables them to continue their collaborative work on collision process of diatomic molecules.

Michael Stavola has worked on two book chapters last year. One has been published (M. Stavola and W. B. Fowler, Ch. 5 in *Hydrogenated Dilute Nitride Semiconductors: Theory, Properties, and Applications*, edited by G. Ciatto; Pan Stanford, 2014), and the other one is currently in press.

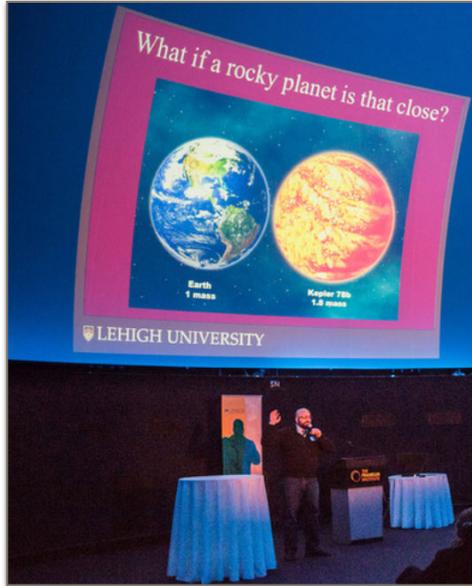
Slava Rotkin, spent his sabbatical leave during the AY 2013/14 at the Technical University in Aachen, which the prime institution in the field of solid state physics in Germany and in Korea at the Sungkyunkwan University. In Spring 2014, he was promoted to Full Professor

Jean Toulouse published a series of papers on various aspects on his work in relaxor ferroelectrics (*Phys. Rev. B* 90, 054118 (2014); *Phys. Rev. B* 90, 054108(2014); and *Euro. Phys. Letters*, 105 (2014) 17001). He is currently working on a textbook on this topic.

Dimitri Vavylonis is currently on sabbatical leave which he spends in the labs in Switzerland, the Netherlands and Japan. He received support from the Swiss National Science foundation to visit the laboratory of Sophie Martin in the Department of Fundamental Microbiology at the University of Lausanne. He worked there in the Fall to study the basic mechanisms of how cells are able to maintain their polarization and acquire a shape during their growth. A recent paper published by him and his graduate student Haosu Tang in the *Molecular Biology of the Cell* in August 2014 has been highlighted in the prestigious list, Faculty of 1000. Another paper with his postdoc Tamara Bidone and Haosu Tang appeared in a special issue of the *Biophysical Journal on Quantitative Cell Biology*.

Asa Packer Event in Philadelphia

Astrophysics and the search for new planets was in the center of a ASA Packer Society event in Philadelphia on February 11, 2014 when Prof.



Josua Pepper described to a large crowd of Lehigh Alumni *How to Discover a Planet in Three (Not So) Easy Steps*. The presentation was followed by a long Q&A period that extended into Cocktail hour. This event was a full success and highlighted the strength of our Astrophysics program.

NSF-Workshop at Lehigh University

On May 20-22, 2014 the department hosted a NSF Workshop on US- Japan Frontiers in Novel Photonic-Magnetic Devices, as a follow-



up of last year's workshop held in Nara, Japan, September, 20-23, 2013. The workshop brought together the key researchers in this area from across the US as well as one representative from Japan. The main goal of this intense 2-day workshop was to condense the results of the meetings into a book on the topic, which will be edited by J. Zavada, I. Ferguson, and V. Dierolf and published by Elsevier and. The book is expected to come out this Summer.

Watkins 90'th Birthday

On May 15th 2014, we celebrated Professor Emeritus, George Watkins' 90th birthday in Richmond, Virginia, where he now lives with his wife Chick. George was for many years the Fairchild Professor of Physics in our Department. His research is in the field of Defects of Semiconductors studied by the magnetic resonance techniques. He has made many important contributions to this



field.

George won the Oliver E. Buckley Prize in 1978, the highest honor in solid-state physics offered by the American Physical Society. He was the Virginian of the Year in 1980, and a recipient of a Humboldt Award for Senior US Scientists in 1983. George was elected to the National Academy of Science 1988, and is the only member of the College of Arts and Sciences at Lehigh University to be honored in this way. Colleagues, former post-docs and students, and friends came from all over the world to honor George and celebrate this occasion. The list of

guests and people who send birthday wishes is long and includes prominent people such as M. Cardona from the Max Planck Institute in Germany, Ted Anderson, former PhD student and postdoc (with Frank Ham), presently a



group leader for Photonics Compact Modeling, at IBM in Burlington, VT, Bernard Clerjaud, University of Pierre et Marie Curie, Paris, John Donegan, former postdoc, presently, Professor, School of Physics and CRANN, Trinity College Dublin, Ireland, Art Edwards, PhD '81, Senior Research Physicist at Air Force Research Laboratory, Kirtland Air Force Base, Robert Peale, former postdoc, presently, Professor, Physics Department, University of Central Florida, Liwei Song, PhD '88, Steve Uffring, 'Ph.D. '98, presently at MIT Lincoln Lab, Chief Scientist, Aegis Ballistic Missile Defense, Joerg Weber postdoc, presently Chair of Semiconductor Physics, Dresden University of Technology, Xuedong Zhan, PhD '92, staff physicist at Videojet in Chicago. Everybody could witness that George has not changed. He is still very sharp and engaged in discussion about music, physics, and life in general.

New Funding

NSF Biaggio, Small-Molecule Vapor-Deposited Materials for Integrated Nonlinear Optics, \$372,486.

NSF Dierolf/McSwain, REU Site: Research Experience for Undergraduates in Physics at Lehigh University. \$717,000.

NSF Dierolf, NSF Workshop on US-Japan Frontiers in Novel Photonic-Magnetic Devices, \$50,378.

U.S. Dept. of Energy, Dierolf (with H. Jain) Laser fabrication of single-crystal architecture in glass: control of morphology (renewal) \$300,000.

U.S. Dept. of Energy, Arnold H. Kritz Predicted Integrated Modeling of Heated Tokamak Plasmas (renewal) \$360,000.

U.S. Dept. of Energy, Arnold H. Kritz Partnership for Edge Physics Simulation (EPSI), \$500,000.

NSF Slava Rotkin, Rare-Earth-DNA-Nanotube Complexes for Bio-sensing Applications (REU supplement), \$6000.

NIH, Dimitri Vavylonis, Modeling and Analysis of Actin Filament Organization in Yeast (supplement), \$44,828.

NSF, A. Peet Hickman, John Huennekens High-Resolution Spectroscopy of Heteronuclear Alkali Molecules: Structure and Dynamics, \$206,170.

UNDERGRADUATE PROGRAM

Once again, we had a fine group of graduates this year.

<i>Mark Claus,</i>	<i>BS AP</i>
<i>Kathryn Lester,</i>	<i>BS AP Highest Honors</i>
<i>Carolina Mattsson,</i>	<i>BS Ph Highest Honors</i>
<i>Sean Napier,</i>	<i>BS AP Honors</i>
<i>Bryan Pflueger,</i>	<i>BS Ph High Honors</i>
<i>Benjamin Punshon-Smith,</i>	<i>BS Ph</i>
<i>Edward Puzycki,</i>	<i>BA Honors</i>
<i>Collin Reiman,</i>	<i>BS Ph High Honors</i>
<i>Lauren Riford,</i>	<i>BS Ph High Honors</i>
<i>Jesse Rowles,</i>	<i>BS AP High Honors</i>
<i>Scott Von Stein,</i>	<i>BS Ph Highest Honors</i>

We are still getting excellent students into our department. This is reflected in a large number of these students graduating with honors.

A Spotlight on our Engineering Physics Major.

(with contributions from R. Moll '61)

The department offers four different majors (B.A. in Astronomy, Physics; B.S in Astrophysics, Physics) as degrees within the College of Arts&Science. But what about our degree program that still resides within the College of Engineering and Applied Science. Indeed, this B.S. in Engineering Physics degree is nowadays often overlooked by students and confused with other offerings such as Arts-Engineering and the IDEAS program. Listening to alumni with this degree, this is a big mistake. They consider this program to be the most distinct and best degree program. Just consider *Richard Moll*, class of '61' who writes:

“In the class of 1961, it was an active and pursued curriculum for almost 10 percent of those in engineering. Why was it selected and what did it do for the individual who graduated with it. It allows those who desired graduate work to advance in that direction and for so many it provided direct employment opportunities as employers wanted bright

individuals who had the platform to be trained and not be narrowly focused.

The degree program provides a general engineering background allowing to move quite easily in many directions inside as well as outside the engineering community. Compared to a regular BS in Physics, the engineering prefix in front of the physics, helps to entice potential employers.

Let me use myself as an example, I wanted a background in various disciplines not knowing where to concentrate and the nine electives per semester in EP permitted that to occur. As a senior at Lehigh and seeking employment, I wanted a management type training program and the industrial engineering courses and statistics played to companies such as Black and Decker and also to my surprise Proctor and Gamble. After time with Proctor and Gamble (can you imagine an EP hired by a soap company!), I headed to graduate school for a year of mathematics study at Ohio State. Next,



Richard Moll,
BS EP '61 with
Physics Chair
during Asa
Packer Society
event in
Philadelphia

it was a stop in the field of computers (in the infancy with only 16K) to be used for anti-submarine warfare (only my EE portion of the education permitted this jump). Then, I decided that I wanted more application and practical engineering. I ended up with a centrifuge company who really was looking for Chemical and Mechanical engineers, but who could not pass up the broadness of the EP background. Thirty five years later taking the path of process and application engineering (also became a known expert in sewage and waste using large and high g-force centrifuges for thickening and dewatering), I reached senior

management heading the company's engineering, research which was really application development, and bridges to sales and marketing.

The initial background in Engineering Physics I credit with providing me the tools to delve into electrical, mechanical, environmental, and metallurgical engineering problems plus with the liberal arts (25 percent of courses) had me ready for management and all aspects of a corporation. We all know that the technical is only responsible for 25-50 percent of one's effort"

The EP degree is a four year program that combines basic physics education with more applied elements from engineering. Currently, we offer concentrations in solid state science and optics but the approved technical electives allow students to spread their interest even further. EP can be combined with an electrical engineering (EE) majors into a five-year EEEP major. In a recent survey, students praised this combinations. They found it a very good fit with their current jobs and also found that taking the Physics classes helped them in pursuing their Ph.D in engineering.

In short, the engineering physics degree is ideal for students who seek a more practical engineering oriented education but like to keep their options open in regards to the specific discipline. Employers like the rigor and breath of educations that this degree program offers.

Society of Physics Students at Lehigh **(by C. Camacho)**

We are very proud to announce that the Society of Physics Students has been booming with new events and members this past semester. It took a lot of effort to get the organization back up and running after an unusually quiet previous year, but we have really come back stronger than before!!

After recruiting a new executive board, (comprised of four smart ladies and one terrific guy!) we got straight to work and organized our first Liquid Nitrogen Ice Cream Social. This event was set right outside Sherman

Fairchild on Memorial Walk to attract new members and to promote how strong and fun our physics community is. Needless to say, many curious onlookers were welcomed to join and offered delicious fresh-made ice cream !

We then organized the Amazing Physics Exhibition. This interactive demonstration was designed to excite people about the power of physics, provide a hands-on experience, and to



Making ice cream the exciting way (using liquid nitrogen)

“blow-away” our audience with Professor DeLeo's show. The event was a great success! Many of our new members helped set up the demos and got the auditorium ready for the show. After the show, many people wanted to meet and talk with our amazing advisor, Professor DeLeo. Many others also stayed to “experiment” with the leftover liquid nitrogen from our previous event. A great time was had by all!!

At the request of many members, we decided to bring back our Science in the Movies event right after the second round of four o'clocks. It was also a great success! Not one slice of pizza or garlic knot was left after just 20 minutes. Everyone sat back and enjoyed as Professor DeLeo took us on a chronological journey to explore the good, the bad, and the ugly science behind television shows and movies!

To finish off our successful semester, we co-hosted this year's Winter Physics BBQ with the Physics Graduate Student Association. Undergraduate students, graduate students, and

faculty members all enjoyed a great night full of music, food, and conversation. We estimate that around 70 people enjoyed the festivities, making it the best attended SPS event in the past four years!

As the Fall semester wraps up, we are continuing to look for new ways to expand and team-up with other organizations — including co-hosting a weekend trip to the Hayden Planetarium in New York City with the Astronomy Club next semester! !

We are also proud to announce that the Society of Physics Students actively promoted all undergraduate students to apply to the Conference for Undergraduate Women in Physics. Through this, we now have three wonderful members — Yssavo Camacho (15'), Michelle O'Toole (16'), and Leah Turner (16')— who will be representing Lehigh at the regional conference held at Rutgers University in January 2015.

Astronomy Club at Lehigh
(by Jacob Mazza, Vice President)

The fall 2014 semester marked the first academic year that the Lehigh University Astronomy Club was fully up and running! Off to a fast start, the beginning of the semester was packed with events open to the entire Lehigh community, including solar gazing on the front lawn and a field trip to the Lehigh Valley Amateur Astronomical Society to see a planetarium show. In order to promote interest in astronomy throughout Lehigh's campus, the members of the LU Astronomy Club organized a presentation on space exploration, given by Dr. Gary DeLeo. The turnout showcased the wide reach of interest in astronomy across academic disciplines. Every event this semester was successful in attracting more and more students, each wanting a deeper knowledge about the planets, stars, and laws that govern the universe in which we exist. Next semester will liftoff strong with a field trip to the Hayden Planetarium at the American Museum of Natural History in New York City. Once spring comes around, the LUAC will have its telescopes setup on clear, warm nights for all of Lehigh University to observe the stars.



Star Gazing on the Front Lawn

Everybody is invited. Look out for the upcoming announcements on the Physics Dept. website. We hope to see you out there!

REU Summer Program

2014 marked the 26th year of the NSF Physics REU Program, and the first year under new leadership. John Huennekens, who has led the program during most of this time period, stepped down and the role was taken over by Ginny McSwain. As a first step in this transition, a new proposal was written last year. In January came the good news that it was funded with a solid budget that provides support for 14 students for the next five years.

Utilizing additional funds, 18 students were working in our department this summer. This strong program was complemented by students working with advisors in other departments



such as Materials Science and Chemistry.

GRADUATE STUDENTS

Once again a large number of students graduated this year during the May 2014 graduation ceremony and since then additional students finished and graduate. Our students continue to be successful in finding jobs in industry, as Post-Docs (3) in excellent places, and academic positions (7).

Marten Beels (Biaggio)	R&D Tiger Optics Inc
Amber Boyer (McSwain)	Assistant Professor, Kutztown University
Ryan Cress (Kim)	Assistant Professor at AirForce Academy
Figen Bekisli (Stavola)	Faculty Teaching Position, Lone Star College, Houston
Tyler Drake (Vavylonis)	Virtu Financial, New York City
Tetyana Ignatova (Rotkin)	Post-Doc, UC Irvine, CA
Daniel Jackson (Toulouse)	Assistant Professor, Penn State University, Lehigh Valley
ByungGook Lyo (Biaggio)	LG Inc, South Korea
Brandon Mitchell (Dierolf)	Assistant Professor Mount Union College, Ohio
Wei Nie (Vavylonis)	
Ling Cai (Toulouse)	Research Scientist at Corning Inc., NY
Carl E. Faust (Huennekens)	Assistant Professor at Susquehanna University, PA
Joshua Jones (Huennekens)	Postdoctoral Fellow in Physics at Colgate University, NY
Brian Knorr (Dierolf)	Assistant Professor, Fairleigh Dickinson University, NJ

Our graduates students continue to excel in their research resulting in more than 40 publications in the AY2013/14 in which they were lead or co-authors. They presented their research in a large number of conferences among them the APS meeting in Denver, the DAMOP meeting in Madison, WI and the Gordon Conference on Defects in Semiconductors.

Graduate Students Alumni News

Corey LaFontaine, MS '10 got a job this spring as a Fiber Engineer with the Zayo Group in Boulder, Colorado.

Yan Yan, PhD '09 finished an MBA at UCLA this summer and landed a job as a Research Analyst with International Data Corporation (IDC) in San Mateo CA, an IT market research firm.

Lee Knauss, PhD '94 is still with Booz-Allen-Hamilton in Virginia and has been promoted to Senior Associate.

Ling Cai, PhD '15 who just got a job with Corning in their Research Center in Corning NY. He will be joining Sasha Marjanovic PhD '04, who has been working there for 10 years, now. Sasha is manager and program leader for Corning Laser Technologies - Laser Machining Systems.

Jon Poplawsky, PhD '12 is now a Staff Scientist at OakRidge National Lab in the Center for Nanophase Materials Sciences specializing in high resolution electron microscopy and atom-probe tomography. He was a co-author of a

recent Phys. Rev. Lett Vol. 112 (15), 156103, that received already considerable attention by the solar cell community.

Chris McIntosh, PhD '01 is still a Physicist with the Night Vision and Electronic Sensors Directorate of the US Army in Fort Belvoir VA.

Zackary Fleischman PhD '07 is still at the Army Research Lab in Adelphi, Maryland and just became father for the second time in late December. Mother, Michelle Fleischman PhD '11 and son Jace are doing fine.

Ben Tayo, PhD '12 is now an Assistant Professor at Pittsburg State University.

Yi Hu PhD '13, joined Micron as a photolithography process development Engineer where she will work on the R&D for next generation NAND Flash memory.

Jingyu Wang, PhD '13 is a photolithography process engineer at GLOBALFOUNDRIES in Malta, New York since fall 2013. She will join the company's manufacturing operation in Dresden, Germany sometime in early 2015.

Physics Graduate Students Association **(by Phil Weiser)**

PGSA is now in its third year and had a year full of activities, starting out in January 2014 with a Wine and Poster Session.

Due to graduation, PGSA had to undergo another change in leadership. Since Fall 2014, the leadership team consists of: President – Philip Weiser, Vice President – Rebecca Bowers, Treasurer – Kara Richter, Secretary – Kebra Ward. This new team already organized several events among them

- **First Year Meet and Greet** on September 18, 2014. The PGSA welcomed the new class of graduate students to our Physics department at the annual pizza meet and greet. The eight incoming students were joined by over 30 members of our department to celebrate the beginning of their studies at Lehigh.



1st-year graduate students listening to mini-presentations by senior graduate student about research.

- **Mid-Atlantic APS Meeting**, October 3 – 5, 2014. The inaugural Mid-Atlantic APS Meeting was held at Penn State University (University Park) the first weekend of October. Our department had twelve graduate students, four undergraduate students, and one faculty member in attendance. Many of the students presented their research at the Saturday evening poster session. Congratulations to *Massooma Pirbhai* for receiving third prize in the Graduate Poster Session!

- **SPS/PGSA Fall Barbecue** on November 20, 2014, SPS and PGSA teamed up to host the department's annual Fall Barbecue. Over 50 faculty, staff, and students celebrated the evening with freshly grilled burgers and hot dogs. A special thanks to Daniel and Kebra Ward for manning the grill in the frigid temperatures.

Local Student Chapter of OSA and SPIE **(by Mina Esmaelpour).**

The Lehigh University student chapters of the Optical Society of America (LUSCOSA) and SPIE were founded in Summer 2012 and 2006, respectively. The two chapters combined have currently 25 members from across disciplines, all actively working in the optics and photonics research area.

For the most recent event on September 11, 2014, LUSCOSA invited Dr. Rene'-Jean Essiambre, a distinguished member of technical staff at Bell Laboratories, to give a talk on the limits of optical fibers to transfer information. The day-long event included several meetings with faculty as well as a lunch with graduate students. The lunch meeting with the speaker has become a great tradition that brings together students from different groups and allows them to interact closely with the speaker and create a network. The very interesting topic of the lecture attracted lots of students and faculty members from several departments such as ECE, Materials Science, and Physics.

In Fall 2014, the Lehigh University Optics and Photonics Society (LUOPS) was established, to allow for a more formal collaboration of the two chapters and to fulfill their missions collectively. The upcoming event of the LUOPS will include SPIE visiting lecturer talk by Prof. Mona Jarrahi from University of California at Los Angeles (UCLA) in the terahertz field in Spring 2015. Further announcements of the future activities of LUOPS, from both OSA and SPIE chapters, will be made in the near future. For more information, please visit our website at

<http://www.lehigh.edu/-inosa/inosa.html>

LEHIGH PHYSICS IN THE NEWS

(use electronic version on Lehigh Physics Web site to access links)

The work of Lehigh Physics faculty, students, and alumni has been highlight on various occasions in various publications and newspapers. Here is just an incomplete collection of that with links to the original source.

- P. Corkum ('67G) and his work on attosecond physics. (Resolve, Vol2, 2014): <http://www1.lehigh.edu/news/when-molecule-takes-selfie>
- A commentary by Knicole Colon, post-doc, about the evidence of water vapor on a distant planet. (National Geographic, Sept. 24th 2014): <http://news.nationalgeographic.com/news/2014/09/140924-space-exoplanet-water-neptune-science-ngspace/>
- Contribution of Joshua Pepper to the debate on access to astronomy data (Nature Vol. 514, Sept. 30th, 2014): <http://www.nature.com/news/astronomy-data-bounty-spurs-debate-over-access-1.16031>
- V. Dierolf and al: Top 5 Physics Paper, (Science Watch, January 2014): <http://sciencewatch.com/articles/physics-top-ten-higgs-bosons-neutrinos-polymer-solar-cells-and-stellar-surveys-vie?elq=c42e1f6038854013910365894461fefe&elqCampaignId=8570>
- Jon Poplawsky, '12G, contributes to a better understanding of solar cells (OakRidge Today, May 4th, 2014): <http://oakridgetoday.com/2014/05/04/atomic-switcheroo-explains-origins-thin-film-solar-cell-mystery/#more-39682>
- Gary DeLeo's stars in a new PBS series (The Morning Call, Oct. 24th, 2014): <http://www.mcall.com/features/family/parenting-blog/mc-pbs39-debuts-new-locallymade-kids-shows-20141024-story.html> and <http://www.mcall.com/entertainment/kids/mc-pbs39-childrens-shows-wlvt-kids-tv-20141116-story.html>
- Library Science Summer Fun with Gary DeLeo (The Morning Call, July 7th, 2014): http://articles.mcall.com/2014-07-07/entertainment/mc-science-library-lehigh-valley-20140707_1_davinci-science-center-dry-ice-bill-nye
- V. Dierolf's research program highlighted (Acumen, Fall 2014): <https://cas.cas2.lehigh.edu/content/flawless-imperfections>
- KUDOS for our REU program (Lehigh News, March 21, 2014): <http://www4.lehigh.edu/news/newsarticle.aspx?Channel=%2FChannels%2FNews+2014&WorkflowItemID=489f6cfc-648d-4639-bb9d-ff720c85f669>

SOME NUMBERS:

11 undergraduate majors graduated in the Academic Year 2013/14
41 undergraduate majors enrolled (Sophomores, Juniors and Seniors)
10 graduate students received their PhD in the academic year 2013/14
4.8 yrs is still the average time to receive a PhD in our department
40 graduate students among them 17 female
\$6000+ was used from Gifts to support student travel to national and international conferences
300% increased citation rate of physics faculty publication comparing the 2000-2005 with the 2008-2013.

Physics Winter Barbecue 2014



Organizers



Chefs



Amazing Physics Exhibition 2014

