# News, Honors & Awards

# In the news...

If you have news you would like to share or an event you would like to announce, please <u>LET US KNOW</u>. Thank you!

# **Honors & Awards**

### Phil Holmes

Prof. Philip Holmes has been chosen to receive the 2013 AMS Leroy P. Steele Prize for Mathematical Exposition. Presented annually by the American Mathematical Society, the Steele Prize is one of the highest distinctions in mathematics. Congratulations Phil!

#### **AMS Fellows**

The American Mathematical Society selected 19 Princeton professors to be among its inaugural class of Fellows, including several of our professors. Click here to see the full list.

### James Murray

Prof. James Murray has been awarded the second <u>William Benter Prize in Applied Mathematics</u> by City University of Hong Kong (CityU).

### Amit Singer, Frans Pretorius

PACM's Amit Singer and Frans Pretorius have been offered an appointment as a <u>Simons Investigator</u> with the Simons Foundation in the inaugural year of the program. Princeton professors Manjul Bhargava and Sanjeev Arora were also named. An <u>announcement has been made</u> in the July 24th edition of *The New York Times*.

### Xiuyuan Cheng

PACM graduate student Xiuyuan Cheng has been awarded an Honorific Fellowship for the 2012-13 academic year. Congratulations Xiuyuan! (6/12)

#### Aman Sinha

PACM certificate student Aman Sinha has been named a Goldwater Scholar. Congratulations Aman! (4/12)

### Distinguished Lecture Series

PACM's Distinguished Lecture Series will return on Friday, April 13, 2012. <u>Click here to see the title/abstract</u> of this year's talk. (4/12)

### Naomi Leonard and Robert Vanderbei

PACM associated faculty members Naomi Leonard and Robert Vanderbei were named <u>2012 SIAM Fellows</u>. Congratulations! (4/12)

#### **Dustin Mixon**

Dustin Mixon has been selected to receive the award for the Best Student Presentation at the <u>36th Annual SIAM Southeastern Atlantic Section Conference</u>. Congratulations Dustin! (3/12)

#### Rachel Ward

PACM graduate (2009 PhD) Rachel Ward has been awarded a <u>Sloan Research Fellowship</u>. Congratulations Rachel! (3/12)

### Simons Fellowship

Associated faculty members Michael Aizenman, Sal Torquato and Elliot Lieb have won <u>Simons Fellowships</u> to support a supplemental semester of leave to increase creativity and provide intellectual stimulation. Congratulations!

### Sergio Verdú

Sergio Verdú has been awarded the 2012 <u>IEEE Information Theory Paper Award</u>. This award is given yearly to a publication in the field of information theory regardless of venue. Professor Verdú also received this award in 1998.

### **Amit Singer**

Prof. Singer has been selected to receive the Presidential Early Career Award for Scientists and Engineers (PECASE). This is the highest honor bestowed by the United States government on science and engineering professionals in the early stages of their independent research careers.

#### Nandi Leslie

PACM alumna, Nandi Leslie (class of 2005), has co-founded College Advocate, a non-profit organization that helps high achieving urban public and charter high school students attend selective colleges. You can read more about the organization here.

### Steven Orszag

Former PACM faculty member, Steven Orszag, passed away on May 1. He was a Forrest E. Hamrick Professor of Engineering and Professor of Applied and Computational Mathematics at Princeton University from 1984-1998. Read more about his legacy here.

#### Phil Holmes

Prof. Phil Holmes has been selected as a Fellow of the <u>Society for Industrial and Applied Mathematics</u>. Congratulations Phil!

#### Jim Stone

Jim Stone has been awarded the <u>American Physical Society Aneesur Rahman Prize</u> for Computational Physics for 2011!

### Phil Holmes

Prof. Phil Holmes has been selected to receive the 2011 Thomas K. Caughey Dynamics Award! This award (sponsored by the ASME Applied Mechanics Division) is given to an individual who has made significant contributions to the field of nonlinear dynamics through practice, research, teaching and/or outstanding leadership.

### Yaron Lipman

Yaron Lipman has been awarded the <u>Blavatnik Award for Young Scientists</u> for postdocs in Computer Science. Congratulations Yaron!

#### PACM Ranked #1

Princeton's Applied Mathematics program ranked top in the country by the National Research Council! <u>Click here to read more</u>.

### Fall 2010 Newsletter

PACM Fall 2010 newsletter available here!

### **Emily Carter**

Prof. Emily Carter has been appointed the founding director of the University's Andlinger Center for Energy and the Environment. <u>Click here</u> to read more!

### **Ingrid Daubechies**

Prof. Ingrid Daubechies has been elected the first woman president of the <u>International Mathematical Union</u>. Congratulations Ingrid!

### **New Acting Director**

<u>Philip Holmes</u> has been officially appointed as the Acting Director of PACM, taking over for Prof. Robert Calderbank. Prof. Holmes previously directed the program until 1997.

#### Simon Levin

PACM Professor Simon Levin will be honored by the Ecological Society of America this summer. <u>Click here</u> to read more. He has also been awarded the <u>2010 Margalef Prize</u>. Congratulations Simon! (7/10)

#### **Ingrid Daubechies**

Prof. Ingrid Daubechies was made an honorary doctor at the <u>Norwegian University of Science and Technology</u> following her presentation of The Lars Onsager Lecture on April 27. (5/10)

#### Lin Lin

Lin Lin has been selected as a recipient of the 2010 Ray Grimm Memorial Prize in Computational Physics. (5/10)

### Yannis Kevrekidis

PACM professor Yannis Kevrekidis has been named a fellow of the <u>Society for Industrial and Applied Mathematics</u> in recognition of his "research contributions in chemical engineering, applied mathematics and the computational sciences." (4/10)

### David Karp

PACM certificate student David Karp has won a \$250,000 Hertz Fellowship! This award provides funding for five years of doctoral study, which Karp will pursue at Stanford University. He has also been named class of 2010 valedictorian. Congratulations David! (5/10)

#### **Ingrid** Daubechies

Prof. Ingrid Daubechies has won a 2010 Guggenheim Fellowship Award! Guggenheim Fellows are appointed on the basis of achievement and exceptional promise. (4/10)

#### Lin Lin

Lin Lin has been awarded a prestigious Honorific Fellowship for the 2010-11 academic year. This fellowship recognizes outstanding and professional promise, and is one of the highest awards available to Princeton graduate students. He has also won the <u>APS Division of Chemical Physics award</u> for his March meeting poster. Congratulations Lin! (4/10)

### **Amit Singer**

Prof. Singer received a 2010 <u>Sloan Research Fellowship!</u> Along with Prof. David Blei, the fellowships were <u>announced in *The New York Times*</u> on March 3, 2010.

### **Ingrid** Daubechies

Congratulations to Ingrid Daubechies for becoming an elected member of the <u>French Academy of Sciences</u>! (12/09) Seymor Wins Fulkerson Prize

Prof. Paul Seymor's joint paper, "The Strong Perfect Graph Theorem," has been awarded the Fulkerson Prize! This prize is sponsored by the Mathematical Programming Society and the American Mathematical Society (9/08).

#### PACM professor receives prestigious prize in mathematics

Weinan E awarded Ralph E. Kleinman Prize (7/09)

Rene Carmona, Ingrid Daubechies, Weinan E, Simon Levin, Bob Tarjan, and Salvatore Torquato have been selected as Fellows of the Society for Industrial and Applied Mathematics. (4/09)

#### Massimo Fornasier

has been awarded the 2008 START Prize of the <u>Austrian Science Fund</u> for the development of the project "Sparse Approximation and Optimization in High Dimensions." (11/08)

### **Philip Holmes**

won the 2009 Lyapunov Award from the American Society of Mechanical Engineers for his lifelong contributions to the field of nonlinear dynamics. News@Princeton (10/08)

#### **Salvatore Torquato**

is the recipient of the 2009 APS David Adler Lectureship Award in the Field of Materials Physics, an award established to recognize an outstanding contributor to the field of materials physics, who is noted for the quality of his/her research, review articles and lecturing. Sal is receiving this award "for his highly original and deep studies of n-point correlation functions in heterogeneous materials and his outstanding communication of these results through publication and public presentation." (9/08)

### **Article of Interest:**

Computer enters the picture (The Philadelphia Inquirer). Research of Ingrid Daubechies. (7/08)

#### Yacine Aït-Sahalia

has been named a fellow of the American Statistical Association. New@Princeton (7/08)

### Amit Singer and Jeroen Tromp

join the core faculty of PACM. PWB (7/08)

#### Iain Couzin

has been named a 2008 Searle Scholar for his innovative research. New@Princeton (6/08)

#### Anand Oza and Jon Ullman:

PACM Independent Project Prize Winners. (for more info: EventPhotos, click "Prize Winners") (6/08)

#### Ed Gerber '06

has just accepted an Assistant Professor position at the Courant Institute, in the Center for Atmospheric and Oceanic Sciences (5/08)

### Simon Levin

has been selected as a foreign member of the Istituto Veneto di Scienze, Lettere ed Arti. News@Princeton (5/08)

### **Emily Carter**

has been elected a Fellow of both the <u>National Academy of Sciences</u>, one of the highest honors that can be accorded a scientist or engineer, and the <u>American Academy of Arts and Sciences</u>, one of the nation's oldest and most prestigious honorary societies and independent policy research centers. (5/08)

#### Taniecea Arceneaux

has been awarded a Ford Foundation Predoctoral Diversity Fellowship. Click here for more information on the Ford

Foundation's Fellowships (4/08)

#### Robert Calderbank

has been recognized with the 2008 Graduate Mentoring Award. This is an "annual award to honor Princeton faculty members who are exemplary in supporting the development of their graduate students as teachers, scholars, and professionals." The recipients of the award will be officially recognized at the Graduate School hooding ceremony, to be held on June 2nd. See the McGraw Center website for more information. (3/08)

Jeremiah Ostriker

has been elected treasurer of the National Academy of Sciences. News@Princeton (2/08)

# **News Archive**

**Emily Carter** 

Led by PACM Professor Emily Carter, researchers discovered an equation for materials innovation. (3/10)

Prof. Holmes' Poetry Showcased

Prof. Philip Holmes was featured in the U.S. 1 Poets Invite program at the Princeton public library in November. Click here to read more. (12/09)

Fall 2009 Newsletter

The Fall edition of the PACM newsletter is available now. Click here to view.

2009 Senior Thesis Topics

It's never too late to start thinking about your senior thesis topics. If you wish to use your mathematical skills for solving a "real-life" problems, PACM offers three exciting applied-science projects for your senior thesis. These problems are the frontier of current research and solving them, or even improving current methods, can make a big difference for a lot of people.

- How to find the 3D structure of a molecule from noisy 2D projection images taken at unknown directions by an electron microscope?
- Use mathematical analysis to understand the spread of herpes
- Can differential geometry help understand brain functionality?

PACM Graduate Lunch

Photos from the 2009 Graduate Welcome Lunch have been posted on the Events page (9/09).

Google Translator

View PACM website in multiple languages! Google Translator now integrated on each page. (8/09)

Salvatore Torquato sets world record in packing puzzle

Click here to read more. (8/09)

WAM/SWIM Programs

Princeton summer programs encourage women mathematicians. Click to read more. (7/09)

PACM Newsletter Launched

PACM's first newsletter debuted for the Spring 2009 semester. (5/09)

Video Section Added

John Nash/Harold Kuhn panel discussion added on the new video page. (4/09)

Christina Lipsky

Joins PACM team as new Technical Coordinator. Please stop by to visit anytime in 204A. (3/09)

Sergio Verdú

awarded the IEEE Richard W. Hamming Medal "For fundamental contributions to information theory and the development of multiuser detection." More info at IEEE (12/07)

Jianqing Fan

received the Morningside Gold Medal of Applied Mathematics for his ground-breaking and seminal work in nonparametric modeling and inferences, for his fundamental contributions to high-dimensional statistical learning, nonlinear time series and biostatistics, and his achievements toward the development of novel statistical techniques in finance and molecular biology. <a href="mailto:news.xinhuanet.com">news.xinhuanet.com</a> (12/07)

Sergio Verdú

awarded the 2007 Claude E. Shannon Award by the Information Theory Society of the Institute of Electrical and

Electronics Engineers for his "consistent and profound contributions to the field of information theory." News@Princeton (8/07)

### Research: Discovery at Princeton University

provides a snapshot of research at Princeton... [The Office of the Dean for research] hopes the report conveys the excitement and importance of research at Princeton today. Research report 2007-08 (2/08)

### Sal Torquato

awarded the <u>SIAM Ralph E. Kleinman Prize</u> for outstanding research, or other contributions, that bridge the gap between mathematics and applications. The value of the work is measured by the quality of the mathematics and its impact on the application. (6/07)

#### Tony Dahlen

affiliate faculty in PACM, passed away Sunday, June 3, 2007. He will be greatly missed by his colleagues and collaborators in Applied Mathematics. *Princeton University* 

#### Tamara A. Broderick and Adam M. Epstein

winners of the APC Independent Project Prize for Certificate Students. (5/07)

#### Jeremiah Ostriker

elected to the Royal Society, the United Kingdom's national academy of science. News@Princeton. (5/07)

#### Christodoulos Floudas

honored for his work mentoring graduate students. He was awarded the Graduate Mentoring Award by the McGraw Center for Teaching and Learning. News@Princeton. (5/07)

### Katy Bold

named on the SEAS's Fall 2006 Commendation List for Outstanding Teaching. (4/07)

### Lester Mackey

a PACM certificate student, won the Moses Taylor Pyne Honor Prize. New@Princeton. (2/07)

### Sergio Verdú

elected a Member of the National Academy of Engineering. NAE press release and News@Princeton. (2/07)

### Martin David Kruskal

the founding director of PACM, passed away on December 26, 2006. He will be truly missed. *Princeton University; Rutgers University* 

### Philip Holmes

elected a Fellow of the <u>American Physical Society</u> for fundamental contributions to the theory of nonlinear dynamics and the development of groundbreaking applications in classical, solid and fluid mechanics, neuroscience, and cognitive psychology. (12/06)

### William Massey

featured in the Princeton Weekly Bulletin for his mentorship of minority and women mathematicians. News@Princeton. (10/06)

### Manuel Torrilhon

was awarded the 2006 EURYI Award for Multi-Physics Scientific Computing. Click here for more details. (10/06) Ingrid Daubechies

was recently interviewed by the Pacific Institute for the Mathematical Sciences. <u>See full article (PDF)</u>. (fall 2006) Christodoulos Floudas

to receive the American Institute for Chemical Engineers 2006 Computing in Chemical Engineering Award, recognizing "outstanding contributions in the application of computing and systems technology to chemical engineering." Click here for more details. (9/06)