Honors and Awards

American Physical Society
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November 22, 2010

Plamen Ivanov
856 Beacon Street
Apt 10
Boston, MA 02215

Dear Dr. Ivanov:

I have the honor of informing you that the Council of the American Physical Society at its November 2010 meeting acted favorably on your nomination for Fellowship in the Society upon the recommendation of the Division of Biological Physics. As you may know, election to Fellowship in the American Physical Society is limited to no more than one half of one percent of the membership. Election to APS Fellowship is recognition by your peers of your outstanding contributions to physics.

The citation, which will appear on your Fellowship Certificate, will read as follows:

> *"For his pioneering applications of statistical physics and nonlinear dynamics to physiology and biomedicine, and for uncovering fundamental scaling and multifractal properties, self-organized criticality, sleep- and circadian-related phase transitions in physiologic dynamics."*

Your name and Fellowship citation, as well as the others elected to Fellowship this year will be published in the March 2011 issue of *APS News*. It also will appear on the Fellowship Page of the APS Home Page [http://www.aps.org]. Presentation of fellowship certificates is usually done at the annual meeting of the unit through which you were elected. If you have any questions regarding the presentation of your certificate, please contact the Secretary/Treasurer of your sponsoring unit (division, forum or topical group). Announcement of your election can be sent to your supervisor or institution public affairs office upon request (please send us the relevant contact information).

Congratulations on being elected a Fellow of the American Physical Society.

Very truly yours,

Alan Chodos

Plamen Ch. Ivanov recieves Pythagoras Prize

posted Feb 27, 2015, 10:04 AM by Network Physiology [updated Dec 1, 2017, 1:46 PM]

Professor Plamen Ch. Ivanov, a native of Sofia, Bulgaria, has received the prestigious Pitagor (Pythagoras) Prize.

The Pitagor Prize is the highest award in Bulgaria for scientific achievements. The award is given annually by the Bulgarian government to honor scientists in the fields of natural sciences, medicine and technology.

The 2014 Pitagor Prize was given in recognition of Dr. Ivanov's seminal contributions to interdisciplinary science at the interface of physics physiology and medicine, for uncovering basic laws of dynamical interactions among physiological systems, and for pioneering a new field, Network Physiology.

The 2014 Pitagor science awards ceremony was hosted by the Ministry of Education and Science of Bulgaria, and was attended by government officials and representatives of the Bulgarian Academy of Sciences, leading universities and institutions.

Prof. Plamen Ch. Ivanov (center) is accompanied by the Deputy Prime Minister of Bulgaria, Dr. Daniela Bobeva (left) and the Minister of Education and Science, Prof. Anelia Klisarova (right).

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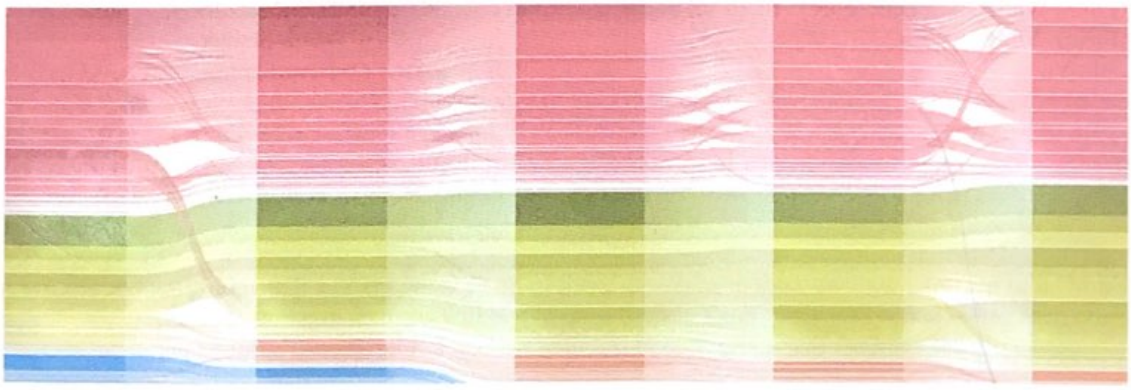
Data-Driven Discovery Investigator Competition Symposium Program July 28-29, 2014



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Participants

Finalists

Yaser Abu-Mostafa
Ankit Agrawal
Pierre Baldi
Joshua Bloom
C. Titus Brown
Jaime Carbonell
Casey Greene
Jeffrey Heer
David Hogg
Rafael Irizarry
Plamen Ivanov
Carl Kingsford
Laurel Larsen
Kwan-Liu Ma
Claire Monteleoni
Carey Priebe
Christopher Re
Kimberly Reynolds
Amit Singer
Kimmen Sjolander
Matthew Stephens
Blair Sullivan
Matthew Turk
Mark van der Laan
Laura Waller
Ethan White
Bin Yu

Advisory Panel

Jean-Philippe Avouac
Amber Boehnlein
Emmanuel Candes
Andy Connolly
Tom Daniel
Jennifer Dunne
Jonathan Feiber
William Goddard
Ed Green
Jessica Green
Josh Greenberg
Joe Hellerstein
Tony Hey
Giuseppe Longo
Michael Lynch
Jill Mesirov
Maria Spiropulu
Victoria Stodden
Joel Tropp

Staff

Vicki Chandler
Chris Mentzel
Julia Metzner
Mark Stalzer
Jasan Zimmerman

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David W. Hogg is a Professor of Physics at New York University and the Deputy Director of the NYU Center for Data Science, with an Adjunct Staff Senior Scientist position at the Max-Planck-Institut für Astronomie in Heidelberg, Germany. His research concentrates on areas in astronomy and astrophysics in which probabilistic inference, computational statistics, and applied mathematics are of greatest benefit. These include making cosmological inferences in large astronomical surveys, calibrating astronomical imaging and spectroscopic devices, and searching for the (incredibly tiny) observational signatures of extra-solar planets.

Rafael Irizarry received his bachelor's in mathematics in 1993 from the University of Puerto Rico and went on to receive a PhD in Statistics in 1998 from the University of California, Berkeley. His thesis work was on Statistical Models for Music Sound Signals. Currently, he is a Professor of Biostatistics and Computational Biology at Dana-Farber Cancer Center and a Professor of Biostatistics at Harvard School of Public Health. For the past fifteen years, Dr. Irizarry's work has focused on Genomics and Computational Biology problems. In particular, he has worked on the analysis and signal processing of modern high-throughput technologies. Dr. Irizarry also develops open source software implementing his statistical methodology. His software tools are widely used and he is one of the leaders and founders of the Bioconductor Project, an open source and open development software project for the analysis of genomic data. This work has helped Dr. Irizarry become one of the most widely cited researchers (according to Thompson Reuters http://highlycited.com/) and has garnered several awards. In 2009, the Committee of Presidents of Statistical Societies (COPSS) named Dr. Irizarry the Presidents' Award winner, arguably the profession's most prestigious award honoring early career contributions.

Plamen Ivanov is a Research Professor at the Physics Department, Boston University and a Lecturer in Medicine at the Division of Sleep Medicine at Harvard Medical School. He has introduced innovative ways of analyzing and modeling physiologic data by adapting and developing concepts and methods from modern statistical physics and applied mathematics. He has investigated the dynamics and underlying control mechanisms of a range of physiological systems, including studies on cardiac and respiratory dynamics, sleep-stage transitions, circadian rhythms, locomotion and brain dynamics, and has uncovered basic laws of physiologic regulation. His work is published in more than 120 publications and several book chapters. Dr. Ivanov has pioneered the study of dynamic networked interactions of physiological organ systems, and in 2012 initiated a new field of research called Network Physiology. His current research focuses on developing methods of data analysis and a theoretical framework to understand how diverse organ systems dynamically interact and collectively behave to produce health or disease. Dr. Ivanov is one of the founding members of PhysioNet, an NIH sponsored data sharing research resource at Harvard Medical School. His research has been funded by NIH, the Office of Naval Research (ONR) and the US-Israel Binational Science Foundation (BSF). For his achievements, Dr. Ivanov was elected Fellow of the American Physical Society in 2010. He is recipient of the Sustained Research Excellence Award (2009-2011) of the Biomedical Research Institute, Brigham and Women's Hospital, Harvard Medical School; of the Georgi Nadjakov Medal, Bulgarian Academy of Sciences (2012), and of the Pythagoras Award for significant achievements in interdisciplinary research (2014).

PHYSICS

Physicist Plamen Ivanov Wins $1 Million Keck Foundation Award

Studies how organ systems coordinate their functions and integrate as a network

Plamen Ch. Ivanov, a research professor in the Boston University Physics Department, has been awarded a $1 million grant from the W. M. Keck Foundation to develop a theoretical framework and establish quantitatively how organ systems coordinate their functions and integrate as a network.

Photo courtesy of Plamen Ivanov

Ivanov is leading a team of research scientists, including Ronny Bartsch, Chunhua Bian, Aylin Cimenser, Xiaolin Huang, Aijing Lin, Kang Liu, Qianli Ma, and Gustavo Zampier. The team members have diverse backgrounds, from statistical and computational physics to neuroscience and physiology, applied mathematics, and biomedical engineering.