

CONSULAR CORPS
RECEPTION 2018

UCHICAGO
ASTROPHYSICS:
A GLOBAL PERSPECTIVE



THE UNIVERSITY OF
CHICAGO

PROGRAM

Tuesday, November 13, 2018

5:00pm **REFRESHMENTS**

5:15pm **WELCOME REMARKS**

Bala Srinivasan

Vice President for Strategy and Innovation and Chief International Officer

Deputy Provost

5:20pm **REMARKS**

Patricia Maza-Pittsford

Dean, Consular Corps

Consul General of the Republic of El Salvador in Chicago

5:25pm **INTRODUCTION TO THE PANEL DISCUSSION**

Bala Srinivasan

Vice President for Strategy and Innovation and Chief International Officer

Deputy Provost

5:28pm **UCHICAGO ASTROPHYSICS: A GLOBAL PERSPECTIVE**

Moderator: Edward W. (Rocky) Kolb

Former Dean of the Division of the Physical Sciences

The Arthur Holly Compton Distinguished Service Professor in the Department of Astronomy and Astrophysics and the College

Paolo Privitera

Professor, Departments of Astronomy and Astrophysics, Physics, Enrico Fermi Institute and the College

Daniel E. Holz

Professor, Departments of Astronomy and Astrophysics, Physics, Enrico Fermi Institute and Kavli Institute for Cosmological Physics

Abigail Vieregg

Assistant Professor, Department of Physics, Enrico Fermi Institute, Kavli Institute for Cosmological Physics, and the College

6:00pm **RECEPTION**

BIOGRAPHIES



BALA SRINIVASAN

Vice President for Strategy and Innovation and Chief
International Officer
Deputy Provost

Bala Srinivasan joined the University of Chicago in September, 2016. As the Vice President for Strategy and Innovation and Chief International Officer, and Deputy Provost, Bala works with University leadership in applied sciences, engineering, and other related quantitative disciplines to help enhance external relations and coordinate development and communication efforts in these areas. Bala oversees the University's global engagement activities and management of the University's Centers in Beijing and Delhi and the new campus in Hong Kong. Further, Bala leads the University's strategic efforts with respect to the education of non-traditional students . and advances leadership development programs across various levels of University administration. Bala is also the interim head of the Polsky Center for Entrepreneurship and Innovation, where he oversees the University's programs and partnerships in venture creation and education, technology commercialization, and business incubation.

Prior to joining the University, Bala served as Managing Director of Och Ziff Capital Management, based in India and Hong Kong; Executive Director of Goldman Sachs Hong Kong; and Associate Director of Jardine Fleming in Singapore, Hong Kong, and Mumbai. He received a B.S. in mathematics from Caltech in 1989 and a Ph.D. in mathematics from the University of Chicago in 1995



PATRICIA MAZA-PITTSFORD

Dean, Chicago Consular Corps
Consul General of the Republic of El Salvador in Chicago

Patricia Maza-Pissford earned her law degree from the Universidad Jose Matías Delgado of El Salvador in 1986. She earned her MBA in International Management in December 1987 from the American Graduate School of International Management (Thunderbird) in Glendale, Arizona and a Master's degree in International Business and Trade Law, LL.M. in May 1992 from Fordham University in New York. From 1992 to 1995 she held the position of Director of the New York office of FUSADES (Salvadoran Foundation for Economic and Social Development), a non-profit organization that promotes investment and exports from El Salvador. She was the Consul General of El Salvador in New York from 1996-2001, when she was transferred in that capacity to the Consulate General of El Salvador in Chicago. She has served as Dean of the Chicago Consular Corps since March 2007.



EDWARD W. (ROCKY) KOLB

Former Dean of the Division of the Physical Sciences
The Arthur Holly Compton Distinguished Service Professor
in the Department of Astronomy and Astrophysics and the
College

Edward (Rocky) Kolb previously served as the Dean of the Division of the Physical Sciences and is the Arthur Holly Compton Distinguished Service Professor in the Department of Astronomy and Astrophysics and the College and a member of the Enrico Fermi Institute and the Kavli Institute for Cosmological Physics.

Kolb's research is in the application of elementary-particle physics to the very early Universe, including cosmic inflation models, gravitational production of particles, particle dark matter, ultra-high energy cosmic rays, and high-energy neutrino astronomy. In addition to over 200 scientific papers, he is a co-author of *The Early Universe*, the standard textbook on particle physics and cosmology, and his book for the general public, *Blind Watchers of the Sky*, received the 1996 Emme Award of the American Aeronautical Society.

Kolb is a Fellow of the American Academy of Arts and Sciences and a Fellow of the American Physical Society. He was the recipient of the 2003 Oersted Medal of the American Association of Physics Teachers for notable contributions to the teaching of physics, the 1993 Quantrell Award for Excellence in Undergraduate Teaching at the University of Chicago, and the 2009 Excellence in Teaching Award from the University's Graham School of Continuing Liberal and Professional Studies.

A native of New Orleans, Kolb earned his bachelor's degree from the University of New Orleans in 1973 and his doctorate in physics from the University of Texas, Austin, in 1978. He holds an honorary degree, Doctor Honoris Causa, from the University of Lyon, France.



PAOLO PRIVITERA

Professor, Departments of Astronomy and Astrophysics,
Physics, Enrico Fermi Institute and the College

Paolo Privitera is an experimental particle astrophysicist and a professor at The University of Chicago. His most recent research focuses on the search for Dark Matter particles, which may explain the puzzling astrophysical and cosmological evidence for an unknown form of matter permeating the universe. Privitera leads the DAMIC experiment, which deploys innovative detectors in the bowels of the French Alps and deep-underground in a Canadian mine. Privitera is also a leader in the

study of ultra-high energy cosmic rays, particles arriving from the cosmos with enormous energies, up to 10 billion times larger than those of the most powerful man-made particle accelerator. The nature and origin of these cosmic rays is a long-standing mystery of particle astrophysics. He has played a major role in the construction of the Pierre Auger Observatory in Argentina, the world's largest cosmic ray experiment, with an area the size of Rhode Island, which, during the last decade, has drastically advanced our knowledge on the highest energy particles in the universe. As a particle physicist, Privitera worked at The European Organization for Nuclear Research, known as CERN, performing precise measurements of the properties of elementary particles. Privitera was awarded an Advanced Grant by the European Research Council.

He received his Laurea in 1989 in Physics while studying in Bologna, Italy and his PhD in 1993, also in Physics, in Karlsruhe, Germany.



DANIEL E. HOLZ

Professor, Departments of Astronomy and Astrophysics, Physics, Enrico Fermi Institute and Kavli Institute for Cosmological Physics

Daniel Holz studies the interface of general relativity, astrophysics, and cosmology. He is a member of the Laser Interferometer Gravitational-wave Observatory (LIGO) collaboration, and is exploring what we learn about the universe from gravitational waves. He contributed to the first detection of gravitational waves, which resulted from the collision of two black holes each 30 times more massive than the Sun falling into each other at half the speed of light in a galaxy a billion light years away. He also contributed to the first gravitational-wave detection of the merger of two neutron stars, and helped identify a counterpart to the event in light. This discovery helped demonstrate where all the gold in the Universe comes from, and allowed for a truly novel measurement of the age of the Universe.

Holz received his PhD from the University of Chicago. He is a Fellow of the American Physical Society, was a recipient of the 2015 Quantrell Award for Excellence in Undergraduate Teaching at the University of Chicago, was awarded the 2016 Gruber Prize and the 2016 Breakthrough Prize in Fundamental Physics, and was selected as a 2017 Kavli Fellow.

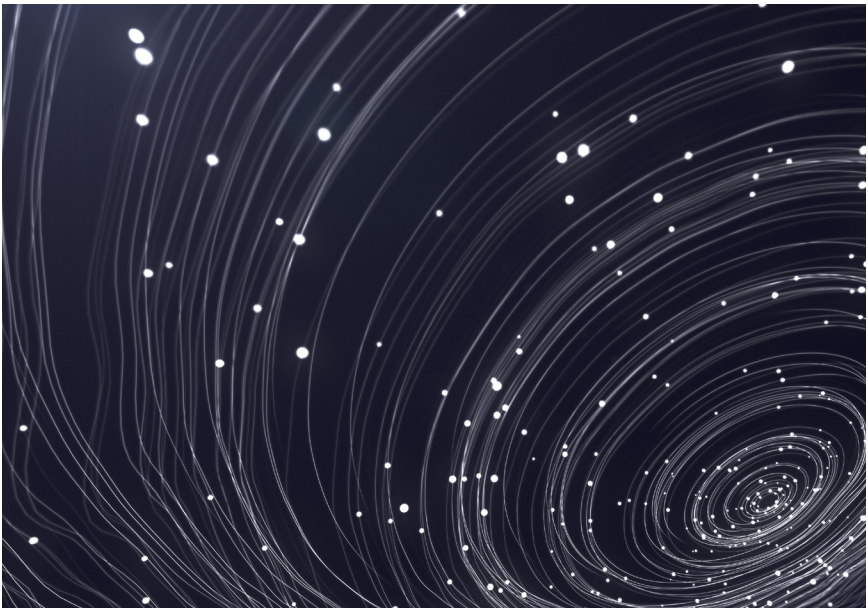


ABIGAIL VIEREGG

Assistant Professor, Department of Physics, Enrico Fermi Institute, Kavli Institute for Cosmological Physics, and the College

Abigail Vieregg is an experimental cosmologist and particle astrophysicist whose research focuses on the detection of ultra-high energy neutrinos and precision measurements of the polarization of the cosmic microwave background. Vieregg leads multiple experimental efforts, which include the ANITA experiment, the ARA experiment, and the CMB-S4 experiment. ANITA and ARA both aim to discover the highest energy astrophysical neutrinos by looking for radio signals generated by neutrino interactions in the Antarctic ice sheet. ANITA is a NASA long-duration balloon experiment that flies over Antarctica, and ARA is a ground-based experiment located at the South Pole. CMB-S4 is a next-generation ground-based experiment that will make the most precise measurements of the polarization of the cosmic microwave background. CMB-S4 will look for evidence of a period of rapid inflation in the extremely early universe and measure the evolution and structure of the universe to shed light on the properties of neutrinos.

Prior to coming to UChicago, Vieregg held a position as an NSF Postdoctoral Fellow at the Harvard-Smithsonian Center for Astrophysics. She received her PhD from the University of California, Los Angeles and her bachelor's degree from Dartmouth College.



ASTROPHYSICS AT UCHICAGO

Research in astronomy and astrophysics at the University of Chicago covers a broad range of topics, including cosmology, extragalactic and galactic astronomy and astrophysics, particle and high energy astrophysics, exoplanets, and the solar system.

Our faculty and staff engage in cutting-edge, forefront research projects in theoretical, experimental, and observational programs to understand the origin and evolution of the universe, the extremely energetic phenomena in the universe, the structure of galaxies and our Galaxy, our solar system, and the search for extrasolar habitable planets. The Department maintains close research ties and partnership with the Argonne National Laboratory, Fermilab, and Adler Planetarium and Astronomy Museum.

CONTACT US

Provide feedback about this event:

We want to make this annual event a useful shared resource for the Chicago Consular Corps community.

If you have any requests or suggestions for future events, please send your comments to global@uchicago.edu.

Contact today's speakers:

If you would like to reach out to any of today's speakers, please contact Carmen Bello-Gimeno at cbellogimeno@uchicago.edu.



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