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Speaker Biographies



C. Megan Urry, President-Elect of the American Astronomical Society, is the Israel Munson Professor of Physics and Astronomy at Yale University and Director of the Yale Center for Astronomy and Astrophysics. She served as the first female chair of the Yale Physics Department from 2007 to 2013. Professor Urry received her Ph.D. in Physics and Astronomy from the Johns Hopkins University in 1984 and her B.S. in Physics and Mathematics from Tufts University in 1977. In the 1990s, she was a senior scientist at the Space Telescope Science Institute, which runs the Hubble Space Telescope for NASA. After moving to Yale, Professor Urry introduced innovative teaching techniques in her physics classes, which led to measureable improvement

in student understanding. She is also well known for her efforts to increase the participation of women in the physical sciences. Professor Urry has published over 200 refereed research articles on super-massive black holes, earning recognition as a Thomson Reuters "Highly Cited Author," and she writes for the public as well, most recently for CNN.com. Professor Urry is a Fellow of the American Academy of Arts and Sciences, the American Association for the Advancement of Science, the American Physical Society, and American Women in Science; and received an honorary doctorate from Tufts University and the 2010 Women in Space Science Award from the Adler Planetarium.



David J. Helfand, currently President of the American Astronomical Society, has served on the faculty of Columbia University in New York for thirty-six years, more than half of that time as Chair of the Department of Astronomy. He has also spent three years at the University of Cambridge, most recently as the Sackler Distinguished Visiting Astronomer. At Columbia, he taught primarily undergraduate courses for non-science majors, including one of his own design that treats the atom as a tool for revealing the quantitative history of everything from human diet and works of art to the Earth's climate and the Universe. Nine years ago, he finally succeeded in implementing a

vision he began working on in 1982 that has all Columbia first-year students taking a science course as part of Columbia's famed Core Curriculum. He received the University's 2001 Presidential Teaching Award and the 2002 Great Teacher Award from the Society of Columbia Graduates. Since 2005, Professor Helfand has been involved in an innovative, new, non-profit university, Quest University Canada; he has been serving as the institution's President since 2008. A decade ago, he appeared weekly on the Discovery Channel's program *Science News*, bringing the latest astronomical discoveries to the US television audience. More recently, his television appearances have been limited to more serious matters on Comedy Central's *The Daily Show* and the National Geographic channel series, *The Known Universe*.

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Ari Buchalter is the Chief Operating Officer (COO) of MediaMath, a leading global advertising technology company that uses cutting-edge technology and advanced data analysis to help Fortune 500 companies determine how to optimize their advertising budgets across digital marketing channels. Ari led MediaMath's growth from a small technology startup in 2008 to a company with over 300 employees today, managing hundreds of millions of dollars in annual media spending for clients all around the globe. Prior to MediaMath, Ari was a Senior Partner at Rosetta, then the nation's largest independent digital marketing agency, and an Associate Principal at McKinsey & Company, where he was also a founding member of their Innovation practice.

Before joining the business world, Ari earned a Bachelor's degree in Physics from Stanford University, a Ph.D. in Astronomy from Columbia University, and was the Lee A. Dubridge Prize Postdoctoral Fellow in Theoretical Astrophysics at the California Institute of Technology. Ari is a recognized thought-leader on digital media, marketing strategy, and the business applications of mathematical analysis. He serves on the advisory boards for several technology startup companies and is a sought after speaker and writer in the digital media industry. He credits his quantitative training in physics and astronomy as instrumental to his successes, from building derivatives pricing models as a hedge fund manager to designing MediaMath's industry-leading advertising trading platform and proprietary algorithms. Ari is passionate about the application of cutting-edge techniques and approaches from scientific disciplines to the development of practical solutions for modern business challenges.



Blake Bullock is the Business Development Director for Civil Air and Space at Northrop Grumman Aerospace Systems in Redondo Beach, CA. In this role, Blake is responsible for leading sector campaigns to address Northrop Grumman business priorities for civilian government agencies and commercial customers. She conducts scientific and technical advocacy for astronomy, astrophysics, earth science and related fields, and drives the campaign toward meeting customer, mission and business objectives. Ms. Bullock previously served as Risk Manager and a Systems Engineer for the James Webb Space Telescope Program at Northrop Grumman Aerospace Systems and as the Webb Telescope Campaign Lead with the Business and Advanced

Systems Development organization. Ms. Bullock also served as a Presidential Management Fellow at the National Aeronautics and Space Administration (NASA) and in the Pentagon for the Office of the Secretary of Defense, Strategic and Space Programs. Prior to this, she lived and worked in New Mexico as a science journalist and Mass Media Fellow of the American Association for the Advancement of Science. She holds a Master's degree in Astronomy from Wesleyan University and a Bachelor's degree in Astrophysics from the University of California, Berkeley. As a research scientist, Ms. Bullock explored the nature of dark matter in dwarf satellite galaxies of the Milky Way. She is a member of Women in Aerospace, the Association for Women in Science, and the American Astronomical Society.

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Margaret (Peggy) Piper has an extensive background in engineering, writing and formal and informal education. She began her career in industry first as a materials engineer and then as a technical writer. Always a natural teacher, she transitioned into formal education and for the last decade has been teaching subjects including Physics, Meteorology, Astronomy and Reading at the high school level. Having dabbled in amateur astronomy, Peggy's passion for astronomy blossomed during her years in education through participation in various professional development and outreach programs at Yerkes Observatory in Williams Bay, WI and subsequently through NASA. As her involvement in the astronomical community expanded, so did her ability

to pay-forward these experiences to her students, her colleagues and the public. Peggy has been involved with the creation and implementation of STEAM (Science, Technology, Engineering, Art and Mathematics) programs at Yerkes Observatory, she is a mentor teacher for NASA/IPAC Teacher Archival Research Program (NITARP), based at the California Institute of Technology, and was one of the first six teachers to fly aboard NASA's Stratospheric Observatory for Infrared Astronomy (SOFIA) as an Airborne Astronomy Ambassador. Peggy is currently embarking on a new career as an Educator at the Adler Planetarium in an effort to become a part of the broader educational community; drawing, engaging, and empowering a more diverse audience of lifelong learners. With her husband Scott, Peggy has raised four children who are in college or beyond in the areas of engineering, architecture and math education.