Presenter Biographies

Donald K. Yeomans

At the Jet Propulsion Laboratory, Dr. Don Yeomans is a JPL Fellow, Senior Research Scientist, Manager of NASA's Near-Earth Object Program Office and Supervisor of the Solar System Dynamics Group. Dr. Yeomans was the Radio Science Team Chief for NASA's Near-Earth Asteroid Rendezvous mission and the NASA Project Scientist for the Japanese mission that landed upon, and returned a sample from, a near-Earth asteroid. He was also a scientific investigator on NASA's Deep Impact mission that successfully impacted comet Tempel 1 in July 2005.He provided the accurate predictions that led to the recovery of comet Halley at Palomar Observatory on October 16, 1982 and allowed the discovery of 164 BC Babylonian observations of comet Halley on clay tablets in the British Museum. His group at JPL is responsible for providing predictions for future close Earth approaches and impacts by comets and asteroids. Dr. Yeomans has received 19 NASA Achievement Awards including an Exceptional Service medal and a Distinguished Service Medal – NASA's highest award. He is also honored by the designation of Minor Planet 2956 Yeomans.

Paul Chodas

Dr. Paul Chodas is a scientist at the Jet Propulsion Laboratory who has computed trajectories of asteroids and comets for over 30 years. He is the architect for much of JPL's small body software that computes orbits and orbit uncertainties, plots trajectories, computes impact probabilities and predicts impact times and locations. In 1999 he coined the term "keyhole" to describe the potential gateway that leads from a close approach to a later impact. In likes to study the trajectories of objects in Earthlike orbits, and in 2002 demonstrated that an unidentified object recently captured into a distant Earth orbit was likely the Apollo 12 third stage returning after 30 years in heliocentric orbit. Over the last 6 months he has worked with the ARM Feasibility Study team on the finding and characterizing ARM targets. He is honored by the designation of Minor Planet 5553 Chodas.

William F. Bottke

Dr. William Bottke is the Director of the Department for Space Studies at Southwest Research Institute (SwRI) in Boulder, Colorado. Bottke is also the Director of the Center for Lunar Origin and Evolution (CLOE) of NASA's Lunar Science Institute. His research interests include the collisional and dynamical evolution of small body populations throughout the solar system (e.g., asteroids, comets, irregular satellites, Kuiper belt objects, meteoroids, dust) and the formation and bombardment history of planetesimals, planets and satellites. He is also interested in how near-Earth objects (NEOs) are delivered from their source regions in various asteroid and cometary populations to their observed orbits. He received a B.S. in Physics and Astrophysics from the University of Minnesota in 1988 and a Ph.D. in Planetary Science from the University of Arizona in 1995. He has also been a postdoctoral fellow at both Caltech (1996-1997) and Cornell University (1997-2000). He is honored by the designation of Minor Planet 7355 Bottke.

Andy S. Rivkin

Dr. Rivkin is a planetary astronomer at the Johns Hopkins University Applied Physics Laboratory. He is an expert in asteroid science, with over 20 years of study and dozens of first-author papers on the subject. He has been involved in several studies relating to asteroid detection and characterization, and led the NASA Small Bodies Assessment Group team tasked with identifying the key "Strategic Knowledge Gaps" that need to be addressed before human visits to near-Earth asteroids can be undertaken. His research specialty is infrared spectroscopy, focusing on measuring hydrated and hydroxylated minerals on main-belt asteroids. He has been honored with the designation of Minor Planet 13743 Rivkin.

Daniel Britt

Dr. Daniel Britt is a Professor of Astronomy and Planetary Sciences at the Department of Physics, University of Central Florida. He has had a varied educational and professional career that started with a Bachelor and Masters degrees in Economics from the University of Washington, service in the US Air Force as a Minuteman ICBM Launch Officer, and private industry with Boeing Aerospace. At 32 he returned to college for a B.S. in Geological Sciences from the University of Washington with the goal of becoming directly involved in planetary exploration. He did his graduate work at Brown University receiving a Ph.D. in 1991. During his graduate career he was named a Smithsonian Institution Graduate Fellow, a NASA Headquarters Graduate Research Fellow and on graduation he was named to a NASA Planetary Astronomy Postdoctoral Fellowship.

Dr. Britt He has served on the science teams of two NASA missions, Mars Pathfinder and Deep Space 1. He was the Project Manager for the camera on Mars Pathfinder and has built the radiometric calibration targets for Mars Pathfinder, Mars Polar Lander, Mars Exploration Rovers, and Mars Science Laboratory. He is the author of over 75 peer-reviewed journal publications and 4 book chapters. Planetary science community activity includes Chair of Planetary Division of the Geological Society of America 1998-1999, Committee Member for the Division for Planetary Sciences Governing Committee 2003-2006, and most recently Chair of the Division for Planetary Sciences of the American Astronomical Society 2011-2012. Honors include 5 NASA Achievement Awards, election as a Fellow of the Meteoritical Society, and an asteroid; 4395 DanBritt.

Mark V. Sykes

Dr. Sykes is CEO and Director of the Planetary Science Institute. He received his Bachelors in Physics from the University of Oregon where he studied eclipsing binary stars, particularly the first black-hole system, Cygnus X-1. After a hiatus of several years pursuing music and other businesses, he received a Masters of Electronic Science from the Oregon Graduate Center, developing Fourier optics processes. He received his Ph.D. in planetary sciences from the University of Arizona in 1986and awarded its Gerard P. Kuiper Memorial Award for his research

on the origins and evolution of interplanetary dust. He received his J.D. from the University of Arizona in 1997 and is admitted to the Arizona Bar and practice before Federal District Court. He has studied and published on comet dust trails, asteroid dust bands, comets, asteroids, and Pluto. He is a Co-Investigator on the NASA Dawn mission and has been honored by the designation of 4438 Sykes for his discoveries. In 2007, he was the first recipient of the NASA Planetary Science Division Distinguished Service Award. He is the Chair of the NASA Small Bodies Assessment Group.

Alan W. Harris

Alan Harris received his PhD in Earth and Space Sciences at UCLA in 1975, and spent 28 years at JPL, for some time in the tracking and navigation group and then in the Earth and Space Sciences Division, as a Senior Research Scientist. His specialty has been small body dynamics and evolution, both orbital and rotational, of asteroids, comets, satellites, and ring particles. Over the past two decades he has participated in numerous studies by NASA, NRC, and international bodies evaluating all aspects of the NEO impact hazard (impact probabilities and consequences, survey design and progress, mitigation strategies, and even social and political aspects). Now retired from JPL, Harris continues an active research program sponsored by NASA and NSF, and serves as a frequent consultant to NASA and JPL on the NEO Program. He is honored by the designation Minor Planet 2929 Harris.