Beyond the Flare: An AAS/SWF Briefing on Space Weather

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Speaker Biographies

Madhulika Guhathakurta is the Lead Scientist for the Living With a Star (LWS) program at the National Aeronautics and Atmospheric Administration (NASA) headquarters in Washington, D.C. LWS focuses on understanding and ultimately predicting solar variability and its diverse effects on Earth, human technology, and astronauts in space. In addition, Dr. Guhathakurta manages a theory, modeling and data analysis program to integrate scientific output, data, and models to generate a comprehensive, systems understanding of Sun-Heliosphere-Planets coupling. Dr. Guhathakurta also leads an international initiative known as the International Living With a Star program that brings together all the space agencies of the world to contribute towards the scientific goal of understanding space weather. Dr. Guhathakurta is a past co-chair and an active member on the inter-agency group Committee on Space Weather of the National Space Weather Program and leads the SWx working group in UN COPUOS.

Dr. Guhathakurta has worked as an educator, scientist, and mission designer; has directed and managed science programs; has built instruments for spacecraft; and has authored over 70 publications. A native of India, Dr. Guhathakurta has a master's degree in astrophysics from the University of Delhi and a Ph.D. degree in physics from the University of Denver and the University of Colorado at Boulder.

Thomas Berger, a native of California, attended the University of California, Berkeley, where he received undergraduate degrees in physics and mechanical engineering. Following his undergraduate work, he joined the Lockheed Aircraft Corporation in Burbank, California, as a flight scientist in the propulsion group of the YF-22 Advanced Technology Fighter program. He then attended Stanford University, receiving a Master of Science in mechanical engineering (fluid mechanics) before joining the Applied Physics department where he received his Ph.D. degree in astrophysics in 1997.

From 1997 to 2012 Dr. Berger led research in solar physics instrumentation, studies of magnetic field generation on the Sun, and the dynamics of solar prominences as a senior staff scientist at the Lockheed Martin Solar and Astrophysics Laboratory in Palo Alto, California. From 2012 to 2014 Dr. Berger served as the Project Scientist for the Daniel K. Inouye Solar Telescope project as a member of the National Solar Observatory. In July of 2014 Dr. Berger was appointed as the Director of NOAA's Space Weather Prediction Center in Boulder, Colorado.

Frank Koza serves as Executive Director of Infrastructure Planning support at PJM Interconnection, where he has worked for over 13 years. He also serves as the Chair of the Geomagnetic Disturbance Standard Drafting Team and former Chair of the Operating Reliability Subcommittee of the North American Electric Reliability Corporation (NERC).

Previously, Mr. Koza worked for 29 years at PECO Energy in a variety of assignments, including construction of fossil and nuclear generation facilities, construction and maintenance of transmission, system planning, and system operations.

Mr. Koza earned his Bachelor of Science in mechanical engineering from the University of Pennsylvania in 1972 and his Master of Engineering from Widener University in 1979. He is a registered professional engineer in the state of Pennsylvania.

Colonel Robert "Rob" Swanson is Chief, Weather Strategic Plans and Interagency Integration Division, Directorate of Weather, Deputy Chief of Staff, Operations, Headquarters U.S. Air Force, Washington, D.C. The Division plans weather, climate and space environmental support for the Air Force Weather functional area and oversees integration of technology and weather into C4I and modeling systems.

Colonel Swanson earned his commission through the Airman Education and Commissioning Program graduating Summa Cum Laude from Texas A&M University. He enjoys a diverse background that includes prior enlisted time, two Air Force Institute of Technology tours culminating in M.S. and Ph.D. degrees, joint, coalition and special operations assignments, and a series of rigorous leadership, scientific, teaching, and staff positions.

Christopher Cannizzaro serves as a Physical Science Officer in the Office of Space and Advanced Technology at the U.S. Department of State. He currently supports the Director on activities as they pertain to the National Space Weather Program Council and Space Weather Initiatives at the UN Committee on the Peaceful Uses of Outer Space.

Prior to joining the State Department he was a research Assistant Research Professor at Tufts University a Research Affiliate in the Harvard-MIT Division of Health Sciences and Technology. Chris received a B.S. from the University of Massachusetts, Amherst and a Ph.D. from the Swiss Federal Institute of Technology (EPFL), both in chemical engineering.

Laura Delgado López is a Project Manager for Secure World Foundation, managing and assisting in the overall planning, direction, administration and coordination of SWF project activities and goals in issues such as Earth observations. Of note are her recent positions as Earth Observations Associate at the Institute for Global Environmental Strategies and as a correspondent for SpacePolicyOnline.com since 2009. Ms. Delgado López currently serves on the Board of Directors of the American Astronautical Society (AAS). Her research has been featured in publications such as Space Policy, Astropolitics, Space News, among others, and has led to media appearance as a space science and policy expert in major Spanish-speaking media outlets, including CNN en Español.

Ms. Delgado López holds an M.A. in international science and technology with a focus on space policy from the George Washington University and a B.A. in political science from the University of Puerto Rico.