Associating airborne fine particulate matter observations from space with human health impacts

Abstract: Air pollution from fine particulate matter (PM) is the leading environmental health risk worldwide and has been associated with a growing list of adverse health outcomes, including cardiovascular and respiratory diseases, low birth weights, and premature deaths. In this talk, Dr. Diner will focus on how satellite remote sensing is used in combination with surface-based pollution monitors and atmospheric models to map PM concentrations, and will discuss ongoing advances aimed at investigating which constituents of the air we breathe are the most harmful.

Speaker Bio: David J. Diner received his Ph.D. in planetary science from the California Institute of Technology in 1978 and has been an employee of the Jet Propulsion Laboratory since 1981. He is currently a Senior Research Scientist in the Earth Science Section and is Principal Investigator of the Multi-angle Imaging SpectroRadiometer (MISR, which has been flying in Earth orbit aboard NASA’s Terra spacecraft for nearly 22 years) and the Multi-Angle Imager for Aerosols (MAIA, currently in development for launch later this decade). Dr. Diner is the recipient of both the NASA Outstanding Leadership and Exceptional Achievement medals.