WRIGHT STATE UNIVERSITY PRESENTS THE WAYNE CARMICHAEL LECTURE IN ENVIRONMENTAL SCIENCES



MARCO TEDESCO, PHD, Lamont Doherty Earth Observatory of the Columbia University

"The melting of the Greenland ice sheet and sea level rise: processes, current estimates and future projections"

Dr. Tedesco will discuss how recent changes in albedo, surface melting and snow compaction have interacted to amplify surface melting though positive feedback mechanisms. He will also discuss how changes in the atmospheric circulation over the Arctic have driven spatial and temporal distribution of melting and snowfall and how they play a key role in the partitioning of surface and ice dynamic losses. Lastly, Dr. Tedesco will discuss a connection between the atmospheric conditions over the Arctic and the jet stream, which offers a potential way to connect changes in the Arctic with those occurring in the mid-latitudes. This aspect is crucial for increasing understanding of how the different Earth System components interact and for improving estimates of the contribution of future sea level rise from the Greenland ice sheet.

BIOGRAPHY

Marco Tedesco is Research Professor at the Lamont Doherty Earth Observatory of the Columbia University and Adjunct Scientist at the NASA Goddard Institute of Space Studies (GISS). He received an ME and PhD in Italy and then moved to NASA where he spent 5 years as a postdoc and Research Scientist. In 2009, he moved to the City College of New York as Assistant Professor , where he was promoted to Associate Professor in 2012. He moved to Columbia on January 2016. While at CCNY, he served as a Program Officer at the Polar Program of the National Science Foundation for 2 1/2 years. Dr. Tedesco's research interests concern remote sensing of the cryosphere, regional climate modeling of the Polar Regions and high-latitude fieldwork. He has been the recipient of grants totaling more than \$5M and has over 90 peer reviewed publications and 250 conference presentations and abstracts.



Wayne Carmichael

FREE AND OPEN TO THE PUBLIC

TUESDAY APRIL 4TH, 2017

GANDHI AUDITORIUM, WHITE HALL WRIGHT STATE UNIVERSITY 5:00 PM RECEPTION, IN LOBBY 6:00 PM LECTURE FREE PARKING IN LOTS 17, 16, 12

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