

Physics Colloquium

Michigan Technological University

February 16 (Thursday) 2006, 4:00 to 5:00 pm
Room 139, Fisher Hall

Growth and Evaporation of Cloud Particles: Recent Findings from the Laboratory

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Clouds offer excellent opportunities to study and apply fundamental physical principles. New laboratory experiments, employing electrodynamic levitation of individual particles, are revealing the complexity with which cloud droplets and ice crystals grow and evaporate by vapor deposition. The data also show that the interfacial exchange of vapor with the condensed phase can be very inefficient under some atmospherically relevant conditions. Calculations with numerical cloud models show that cloud properties are sensitive to the growth efficiencies of the individual particles.

Dr. Lamb received his BS in Physics from Kalamazoo College; Ph.D. in Atmospheric Science from University of Washington, and was a postdoc at Johann Wolfgang Goethe Universität in Frankfurt, Germany. Currently he is a Professor at Penn State University, where he has been on the faculty since 1986.