

Lidar Exploration of Antarctic Atmosphere, Space, and Beyond

时间：9月10日 下午3:00

地点：九章大厦A709室

报告人：初鑫钊教授

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初鑫钊教授是中高层大气探测研究方面的卓越科学家，是国际上第一个利用激光雷达对南北极点进行大气探测的科学家，在中高层大气的探测与研究领域取得了多项重大科学发现，并正在引领国际激光雷达中高层大气探测研究的发展方向。

报告内容：Shooting lidar beams to the southern skies and detecting the mysterious meteoric Fe and Na layers and persistent waves is one of the major activities conducted by the University of Colorado Boulder (CU) lidar group in the last eight years. CU graduate students, one per year, have braved through the harsh Antarctic winters, operating lidars for invaluable data to study the atmosphere and space. They made tremendous contributions to the success of McMurdo lidar campaign. Many new science discoveries have emerged from the data in the studies of space-atmosphere interactions, ranging from the unprecedented thermosphere-ionosphere Fe and Na (TIFe and TINa) layers, to persistent gravity waves, to aurora-enhanced tidal amplitudes, and to solar and geomagnetic effects on atmospheric composition and dynamics. We are forming a few big pictures concerning the meteoric metal layers and gravity waves over the Antarctic. This seminar will introduce what we have learned and what we are studying from the 8-year McMurdo lidar campaign. More CU students are preparing their trips to continue the legendary lidar campaign in Antarctica.