



## Seminar Series in Applied Mathematics

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Dr. Ronald M. Errico

National Center for Atmospheric Research

### *The Uses of Geophysical Adjoint Models*

Tuesday, September 19, 2000

3:15 pm

Morton 103

*Abstract:* Adjoint models are used in many fields. In this talk, examples of adjoint model interpretation and applications in meteorology will be described. Some examples of adjoint-derived fields will be shown in the contexts of sensitivity analysis of initial and boundary conditions and singular vector decomposition. Focus of the presentation will be on the ways in which adjoint-derived results are having a profound impact on our understanding of atmospheric processes. Many of these results were unforeseen using other analysis tools, and some require development of new fundamental paradigms. It will be suggested that applications in other fields can also have profound impacts. Some misunderstandings regarding adjoint models will also be addressed.

*Refreshments will be available starting at 3:00pm.*

*For additional information contact Patrick Miller (216-5452) or Yi Li (216-5433).*

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