1016-53-96   **Hongyou Wu*** (`wu@math.niu.edu`), Department of Mathematics, Northern Illinois University, DeKalb, IL 60116. *Some Geometric Aspects of Nonlinear PDE's.* Preliminary report.

The classical Backlund transformation yields a new pseudo-spherical surface from a known one. In this talk, we will present some classification results on Backlund transformations for nonlinear PDE's and Miura transformations among nonlinear PDE's. We will also discuss how to obtain and classify finite dimensional completely integrable systems from Nonlinear PDE's. Such systems usually have applications in geometry. (Received February 04, 2006)