

**Meeting:** 1004, Bowling Green, Kentucky, SS 12A, Special Session on Partial Differential Equations and Their Applications

1004-35-92            **Fengbo Hang\*** ([fhang@math.msu.edu](mailto:fhang@math.msu.edu)), Department of Mathematics, Michigan State University, East Lansing, MI 48824, and **Xiaodong Wang** ([xwang@math.msu.edu](mailto:xwang@math.msu.edu)), Department of Mathematics, Michigan State University, East Lansing, MI 48824. *A new approach to some nonlinear geometric equations in dimension two.*

I will describe a new way to classify conformal metrics on the plane with constant curvature and finite area (the half plane case with suitable boundary condition will also be discussed). The main ingredients are the association of a natural holomorphic function to such equations and some Liouville type results. (Received January 18, 2005)