Meeting: 998, Houston, Texas, SS 23A, Special Session on Curvature and Geodesics

998-53-371 **Alvaro Perez Raposo*** (`aperez@fc.uaslp.mx`), Facultad de Ciencias, Av. Salvador Nava, s/n, Zona Universitaria, 78290 San Luis Potosi, SLP, Mexico. *Curvature, Geodesics and Differential Equations.* Preliminary report.

A few results are exhibited on the control that curvature and geodesics of a semi-Riemannian manifold exert on the solutions of particular differential equations possed on it. The ultimate goal is to clarify the necessity of a semi-Riemannian structure on the manifold in order to define some differential equations. (Received March 02, 2004)