

Meeting: 998, Houston, Texas, SS 20A, Special Session on Differential Geometry

998-53-263 **Renato Feres*** (feres@wustl.edu), St. Louis, MO 63130, and **A Zeghib**. *Dynamics on the space of harmonic functions and the foliated Liouville problem.*

Given a foliation of a compact manifold by Riemannian leaves, we say that it has the Liouville property if a continuous, leafwise harmonic function is leafwise constant. We describe a variety of situations where the property holds and give a general class of examples where it fails. We also explore the connection this problem has with the dynamics of actions of groups of isometries of the Poincare disc, D , on the unit ball of the space of bounded harmonic functions on D . (Received March 01, 2004)