

1023-53-912

**Mingliang Cai** ([m.cai@math.miami.edu](mailto:m.cai@math.miami.edu)), Dept. of Math., University of Miami, Coral Gables, FL 33124, and **Jie Qing\*** ([qing@ucsc.edu](mailto:qing@ucsc.edu)), Department of Mathematics, University of California, Santa Cruz, CA 95064. *On the uniqueness of asymptotically AdS space-times*. Preliminary report.

In this talk, we will discuss the Ricci curvature rigidity for a class of asymptotic hyperbolic manifolds in all dimension with no assumption of spin structure. Consequently we have the uniqueness of the conformally compact Einstein manifolds as well as the uniqueness of the strictly stationary, asymptotically AdS solution to the vacuum Einstein equations with negative cosmological constant for all dimensions with no spin structure assumption. Our proof does not use positive mass theorem. (Received September 22, 2006)