

1032-42-165

Carlos Perez* (carlosperez@us.es), Department of Mathematics, University of Kansas, Lawrence, KS 66045-7523, **David Cruz-Uribe** (david.cruzuribe@trincoll.edu), Department of Mathematics, Trinity College, Hartford, CT 06106-3100, and **Jose Maria Martell** (chema.martell@uam.es), Calle Serrano 123, 28026 Madrid, Spain. *On the two weight problem for the Hilbert Transform.*

We give sufficient conditions for the two weight problem for any Caldern-Zygmund Singular Integral Operator. This condition is sharp for the Hilbert transform and they involve logarithmic norms and they are in the spirit of the A_p condition of Muckenhoupt. As an application we give new results for the Sarason conjecture for Toeplitz operators. (Received August 20, 2007)