

Meeting: 1003, Atlanta, Georgia, SS 33A, AMS Special Session on Topics in Geometric Function Theory, I

1003-30-464 **John L Lewis***, Mathematics Department, University of Kentucky, Lexington, KY 40506, and
Bjorn Bennewitz, Mathematics Department, University of Kentucky, Lexington, KY 40506. *On
the dimension of p harmonic measure.*

We study the dimension of a measure associated with a p harmonic function which vanishes on the boundary of a quasicircle. First we prove for a quasicircle that the dimension is greater than or equal to 1 when p is between 1 and 2 while the dimension is less than or equal to 1 for p larger than 2. Second using a method of Carleson - Wolff we show for the Van Koch snowflake that strictly greater (less) holds for the given range of p 's. (Received September 15, 2004)