

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

1003-31-594 **Bao Qin Li** (libaoqin@fiu.edu), Department of Mathematics, Florida International University, Miami, FL 33199, and **Enrique Villamor*** (villamor@fiu.edu), Department of Mathematics, Florida International University, Miami, FL 33199. *Boundary limits for bounded quasiregular mappings.*

We establish results on the existence of nontangential limits for weighted \mathcal{A} -harmonic functions in the weighted Sobolev space $W_w^{1,q}(\mathbb{B}^n)$, for some $q > 1$ and w in the Muckenhoupt A_q class.

These results give sharp results on the existence of radial limits for bounded quasiregular mappings in the unit ball with some growth restriction on their multiplicity function. (Received September 23, 2004)