

# SOME EXTENSIONS OF THE F. AND M. RIESZ THEOREM

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## ABSTRACT

If a holomorphic function  $f$  of one variable is defined on a smoothly bounded domain  $D$  and grows temperedly at the boundary then it has a weak boundary value  $bf$ . A classical theorem of F. and M. Riesz states that if  $bf$  is a Borel measure, then it is absolutely continuous with respect to linear measure, i.e., Lebesgue measure on  $\partial D$ . We discuss extensions of this theorem, including the following situations: i) measures that are boundary values of holomorphic functions defined on wedges of  $\mathbb{C}^N$  with edges in the class  $C^{1,\alpha}$ , ii) measures that are boundary values of homogeneous solutions (defined on wedges with strongly noncharacteristic edges) of involutive systems of real analytic vector fields.

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