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NOTE ON EXTREME POINTS IN MARCINKIEWICZ FUNCTION SPACES

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Dedicated to Professor Lars-Erik Persson on his 65th birthday

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ABSTRACT. We show that the unit ball of the subspace M_W^0 of ordered continuous elements of M_W has no extreme points, where M_W is the Marcinkiewicz function space generated by a decreasing weight function w over the interval $(0,\infty)$ and $W(t) = \int_0^t w, t \in (0,\infty)$. We also present here a proof of the fact that a function f in the unit ball of M_W is an extreme point if and only if $f^* = w$.

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