

1068-00-202

**James Wright Scurry\*** ([jscurry3@math.gatech.edu](mailto:jscurry3@math.gatech.edu)). *A Characterization of Two-Weight Inequalities for a Vector-Valued Operator.*

We give a characterization of the two-weight inequality for a simple vector-valued operator. Special cases of our result have been considered before in the form of the weighted Carleson embedding theorem, the dyadic positive operators of Nazarov, Treil, and Volberg in the square integrable case, and Lacey, Sawyer, Uriarte-Tuero in the  $L^p$  case. The main technique of this paper is a Sawyer-style argument and the characterization is for  $1 < p < \infty$ . We are unaware of instances where this operator has been given attention in the two-weight setting before. (Received January 18, 2011)