

# Weights, Extrapolation And The Theory Of Rubio De Francia

[DOWNLOAD HERE](#)

1;Contents;6 2;Preface;10 3;Preliminaries;12 4;Part I One-Weight Extrapolation;16 4.1;Chapter 1 Introduction to Norm Inequalities and Extrapolation;17 4.1.1;1.1 Weighted norm inequalities;18 4.1.2;1.2 The theory of extrapolation;25 4.1.3;1.3 The organization of this book;28 4.2;Chapter 2 The Essential Theorem;31 4.2.1;2.1 The new proof;32 4.2.2;2.2 Extensions of the extrapolation theorem;34 4.2.2.1;Generalized maximal operators;34 4.2.2.2;Elimination of the operator;35 4.2.2.3;Sharp constants;37 4.2.2.4;Off-diagonal extrapolation;38 4.2.2.5;Extrapolation for arbitrary pairs of operators;38 4.2.2.6;Limited range extrapolation;39 4.2.2.7;Extrapolation to Banach function spaces;39 4.3;Chapter 3 Extrapolation for Muckenhoupt Bases;41 4.3.1;3.1 Preliminaries;41 4.3.1.1;Muckenhoupt bases;41 4.3.1.2;Pairs of functions;44 4.3.1.3;A technical reduction;45 4.3.2;3.2 Ap extrapolation;47 4.3.3;3.3 Rescaling and extrapolation;50 4.3.3.1;A1 extrapolation;53 4.3.4;3.4 Sharp extrapolation constants;54 4.3.5;3.5 Off-diagonal extrapolation;58 4.3.6;3.6 Extrapolation for pairs of positive operators;63 4.3.6.1;Extrapolation for one-sided weights;63 4.3.6.2;Extrapolation for pairs of positive operators;65 4.3.7;3.7 Limited range extrapolation;68 4.3.8;3.8 Applications;75 4.3.8.1;Norm inequalities for operators;75 4.3.8.2;Vector-valued inequalities;75 4.3.8.3;Coifman-Fefferman inequalities;76 4.4;Chapter 4 Extrapolation on Function Spaces;78 4.4.1;4.1 Preliminaries;79 4.4.1.1;Banach function spaces;79 4.4.1.2;Examples of function spaces;82 4.4.1.3;Modular spaces;83 4.4.1.4;Examples of modular spaces;85 4.4.2;4.2 Extrapolation on Banach function spaces;85 4.4.2.1;General function spaces;85 4.4.2.2;Rearrangement invariant spaces;88 4.4.3;4.3 Extrapolation on modular spaces;91 4.4.4;4.4 Applications;97 4.4.4.1;Modular spaces and r.i. function spaces;98 4.4.4.2;Variable Lebesgue spaces;98 5;Part II Two-Weight Factorization and Extrapolation;107 5.1;Chapter 5 Preliminary Results;108 5.1.1;5.1 Weights;108 5.1.2;5.2 Orlicz spaces;108 5.1.3;5.3 Orlicz maximal operators;110 5.1.4;5.4 Generalizations of the Ap condition;114 5.1.4.1;Log bumps;116 5.1.4.2;Log-log bumps;117 5.1.4.3;Exponential log bumps;118 5.1.4.4;Power bumps;119 5.1.5;5.5 The composition of maximal operators;121 5.1.6;5.6 Orlicz fractional maximal operators;125 5.1.7;5.7 Composition of fractional

maximal operators;127 5.2;Chapter 6 Two-Weight Factorization;133 5.2.1;6.1 Reverse factorization and factored weights;134 5.2.2;6.2 Factorization of weights;136 5.2.3;6.3 Inserting  $A_p$  weights;140 5.2.4;6.4 Weights for fractional operators;141 5.2.4.1;Reverse factorization and factored weights;141 5.2.4.2;Factorization of weights;143 5.3;Chapter 7 Two-Weight Extrapolation;145 5.3.1;7.1 Two-weight extrapolation;147 5.3.1.1;Extrapolation and families of Orlicz bumps;148 5.3.1.1.1;No bump condition;148 5.3.1.1.2;  $B_p$  bumps;148 5.3.1.1.3;Log bumps;149 5.3.1.1.4;Exponential log bumps;150 5.3.1.1.5;Power bumps;150 5.3.2;7.2 Proof of two-weight extrapolation;152 5.3.3;7.3 Two-weight, weak type extrapolation;158 5.3.4;7.4 Extrapolation for factored weights;160 5.3.5;7.5 Extrapolation for fractional weights;164 5.3.6;7.6 Appendix: A one case proof of extrapolation;166 5.4;Chapter 8 Endpoint and  $A_8$  Extrapolation;173 5.4.1;8.1 Endpoint extrapolation;175 5.4.2;8.2 Three special cases for the pairs  $(u, Mu)$ ;177 5.4.3;8.3 The converse of endpoint extrapolation;179 5.4.4;8.4 Endpoint extrapolation for fractional operators;182 5.5;Chapter 9 Applications of Two-Weight Extrapolation;185 5.5.1;9.1 The sharp maximal operator;186 5.5.1.1;Coifman-Fefferman type inequalities;190 5.5.1.2;Proof of Lemma 9.2;194 5.5.2;9.2 Singular integral operators;196 5.5.2.1;The conjectures;197 5.5.2.2;Strong  $(p, p)$  inequalities;198 5.5.2.3;Weak  $(p, p)$  inequalities;202 5.5.2.4;Inequalities for factored weights;204 5.5.3;9.3 Fractional integral operator EAN/ISBN : 9783034800723 Publisher(s): Springer, Berlin, Springer, Basel Discussed keywords: Extrapolation Format: ePub/PDF Author(s): Cruz-Uribe, David V. - Martell, Jos M. - Prez, Carlos

[DOWNLOAD HERE](#)

### Similar manuals:

[Practical Extrapolation Methods](#)

[Weights, Extrapolation And The Theory Of Rubio De Francia](#)

[MP3 The Goat Island Extrapolation - The Goat E.P.](#)