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## Clarkson-McCarthy Interpolated Inequalities in Finsler Norms

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**Abstract:**

We apply the complex interpolation method to prove that, given two spaces  $B_{p_0, a, s_0}^{(n)}$ ,  $B_{p_1, b, s_1}^{(n)}$  of  $n$ -tuples of operators in the  $p$ -Schatten class of a

Hilbert space  $H$ , endowed with weighted norms associated to positive and invertible operators  $a$  and  $b$  of  $B(H)$  then, the curve of interpolation

$(B_{p_0, a, s_0}^{(n)}, B_{p_1, b, s_1}^{(n)})_{[t]}$  of the pair is given by the space of  $n$ -tuples of

operators in the  $p_t$ -Schatten class of  $H$ , with the weighted norm associated

to the positive invertible element  $\gamma_{a,b}(t) = a^{1/2}(a^{-1/2}ba^{-1/2})^t a^{1/2}$ .

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