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AN EXTENSION OF KY FAN'S DOMINANCE THEOREM

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ABSTRACT. We prove that for a separable Hilbert space \mathcal{H} with an orthonormal basis $\{e_i\}_{i=1}^\infty$, the equality $\|\cdot\| = \|\sum_{i=1}^\infty s_i(\cdot)e_i \otimes e_i\|$ holds for all unitarily invariant norms on $\mathbb{B}(\mathcal{H})$ and Ky Fan's dominance theorem remains valid on $\mathbb{B}(\mathcal{H})$.

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