

REFINED JENSEN'S OPERATOR INEQUALITY WITH CONDITION ON SPECTRA

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Abstract. We give a refinement of Jensen's inequality for n -tuples of self-adjoint operators, unital n -tuples of positive linear mappings and real valued continuous convex functions with condition on the spectra of the operators. The refined Jensen's inequality is used to obtain a refinement of inequalities among quasi-arithmetic means under similar conditions. As an application of these results we give a refinement of inequalities among power means.

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