

Colloquium Talk

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Wednesday, January 25th
Hume 321 at 4:00pm

Some variants of the classical inequalities in vector lattices

We illustrate in this talk how the theory of Archimedean vector lattices is a convenient apparatus for shedding new light on the classical inequalities. In particular, we introduce simple proofs of the Hölder and Minkowski inequalities in Archimedean vector lattices and use these results to improve related inequalities existing in the literature. We also provide an identity involving semi-inner product-like maps from the Cartesian square of a vector space into an Archimedean vector lattice from which a generalization of the classical Cauchy-Schwarz inequality immediately follows.