IDEALS OF OPERATORS ON ORDERED SPACES (JOINT WORK WITH E.SPINU)

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Abstract. Suppose X and Y are ordered spaces (for instance, C*-algebras, or non-commutative function spaces). We investigate the ideals of operators from X to Y, focusing on two questions.

(i) The domination problem: suppose T and S are positive operators from X to Y, so that S belongs to a certain ideal I, and dominates T. Must T belong tho the same ideal?

(ii) The inclusion of ideals: if I and J are operator ideas, when is $I(X,Y)$ a subset of $J(X,Y)$? The same question can be asked for positive parts of these ideals.

We mostly concentrate on the ideals of compact, weakly compact, strictly singular, finitely strictly singular, and inessential operators.

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