On operator hyperreflexivity of subspace lattices

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Let \mathcal{H} denote a Hilbert space and $\mathcal{P}(\mathcal{H})$ a lattice of all orthogonal projections on \mathcal{H} . A subspace lattice \mathcal{L} is called *operator hyperreflexive* if there is a constant C > 0 such that

$$\operatorname{dist}(P, \mathcal{L}) \le C \sup_{\|x\| \le 1} \operatorname{dist}(Px, \mathcal{L}x)$$

for all projections $P \in \mathcal{P}(\mathcal{H})$.

Some results and examples will be presented. In particular we will show that all orthogonal complemented CSL are operator hyperreflexive.