
Zbl 0926.46054**Oertel, Frank****Local properties of accessible injective operator ideals.** (English)

Czech. Math. J. 48, No.1, 119-133 (1998).

<http://www.springerlink.com/link.asp?id=106594>

In contrast to Pisier's example of a non-accessible maximal Banach ideal, the author exhibits a large class of maximal Banach ideals which are accessible. The construction is based on a characterization of total accessibility of injective hulls of maximal Banach ideals (if $(\mathcal{A}, \mathbf{A})$ is a maximal Banach ideal, then $(\mathcal{A}^{inj}, \mathbf{A}^{inj})$ is totally accessible if and only if $(\mathcal{A} \circ \mathcal{A}^*, \mathbf{A} \circ \mathbf{A}^*) \subseteq (\mathcal{P}_1, \mathbf{P}_1)$, the ideal of absolutely summing operators) and an operator version of Grothendieck's inequality. As a consequence, it is obtained, for instance, that if $(\mathcal{A}, \mathbf{A})$ is a maximal Banach ideal such that $(\mathcal{D}_2, \mathbf{D}_2) \subseteq (\mathcal{A}, \mathbf{A}) \subseteq (\mathcal{L}_1, \mathbf{L}_1)$ and both $(\mathcal{A}, \mathbf{A})$ and $(\mathcal{A}^*, \mathbf{A}^*)$ are metrically ε -tensorstable, then $(\mathcal{A}^{inj}, \mathbf{A}^{inj})$ is totally accessible. Several other criteria for right- and total accessibility are established, and applications to normed products of operator ideals are also given.

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Classification :

- *46M05 Tensor products of topological linear spaces
- 47L20 Operator ideals
- 47A80 Tensor products of operators