

## Ideal extensions of classes of linear operators

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### **Resumo/Abstract:**

We will talk about the problem of extending classes of linear operators between Banach spaces to operator ideals. We establish necessary and sufficient conditions on a class  $B$  of Banach spaces and on a class  $O$  of operators taking values in Banach spaces belonging to  $B$  so that  $O$  can be extended to an operator ideal. As applications we characterize the extendability of the class of quasi- $\tau(p)$ -summing operators, we construct the operator ideal generated by an ideal of bilinear functionals and we prove that the class of weak\*-sequentially compact operators taking values in dual spaces is not extendable to an operator ideal.