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**Interpolation of compact operators on Banach triples.** (English) Zbl 1004.46048

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Summary: Let  $\bar{A} = (A_0, A_1, A_2)$  and  $\bar{B} = (B_0, B_1, B_2)$  be *LP*-triples (Lions-Peetre triples) of Banach spaces and let  $T$  be a linear operator. If  $T: A_0 \rightarrow B_0$  is compact and  $T: A_i \rightarrow B_i$  is bounded ( $i = 1, 2$ ), then also  $T: \bar{A}_{f,p} \rightarrow \bar{B}_{f,p}$  is compact, where  $f$  belongs to the class  $B_K^2$  and  $1 \leq p \leq \infty$ .

**MSC:**

- 46M35 Abstract interpolation of topological vector spaces
- 47B07 Linear operators defined by compactness properties
- 46B70 Interpolation between normed linear spaces

**Keywords:**

Banach triples; interpolation of Banach space operators; Lions-Peetre triples