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Title: On the Browder essential spectrum of a linear relation

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For a closed linear relation on a Banach space the concepts of Browder and Browder essential spectrum are introduced and studied. If a densely defined closed linear relation T has a trivial singular chain, then T is Browder if and only if $T = B + K$, where B is a bijective linear relation, and K belongs to set $\mathcal{K}(X)$ of everywhere defined single valued compact linear operators, and left commutes with T . This is used to prove that the Browder essential spectrum coincides with the set $\cap \{\sigma(T + K) : K \in \mathcal{K}(X) \text{ and } KT \subset TK\}$.

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