Title: On the Moore–Penrose inverse of a closed linear relation

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For a closed multivalued linear operator $T$ between complex Hilbert spaces the concept of Moore–Penrose inverse of $T$, denoted $T^+$, is introduced and studied. We prove that if $y \in D(T^+)$, then $T^+y$ is the least square solution of minimal norm of the relation equation $y \in Tx$. We also approximate $T^+$ by a sequence of bounded finite rank operators. Such results generalize the existing results to the case of densely defined closed operators.

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