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Lomonosov's Invariant Subspace Theorem for Multivalued Linear Operators.

The famous Lomonosov's invariant subspace theorem states: if a continuous linear operator T on an infinite-dimensional normed space E "commutes" with a nonzero compact operator K , i.e., $TK=KT$, then T has a non-trivial closed invariant subspace. We generalize this theorem for multivalued linear operators and also provide some applications to single-valued operators. (Received September 24, 2000)