

Invariant Reproducing Kernel Krein Spaces

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We are considering actions of semigroups with involution that give rise to representations of the semigroup on reproducing kernel Krein spaces. The characterizations we are looking for refer to two aspects: an algebraic aspect reflected by a certain symmetry that is expressed as the invariance of the kernel with respect to the action of the semigroup on the base set and an order-topological aspect that is expressed by a boundedness condition of L. Schwartz type. We consider possible applications to topological groups and analyticity.