

SEMIGROUPS OF PARTIAL ISOMETRIES

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We present results on the spatial structure of self-adjoint semigroups of partial isometries on a Hilbert space. The class of semigroups coincide precisely with that of faithful representations of abstract inverse semigroups. It includes groups of unitary operators as well as self-adjoint bands. Not necessarily self-adjoint semigroups of partial isometries are also considered and the following question discussed: under what conditions can such a semigroup be extended to a self-adjoint one? This is joint work with Alexey Popov.

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