
*Workshop dedicated to the memory of Professor Gabriela Kohr
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Partially Positive Semidefinite Maps on $*$ -Semigroupoids

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Abstract

Motivated by graph C^* -algebras and topological groupoids, we consider positive semidefinite maps on $*$ -semigroupoids and investigate their dilations to $*$ -representations. These maps obey certain degrees of aggregation and, correspondingly, they require certain degrees of orthogonality. There are two types of dilation theorems that we obtain, firstly by unbounded operators and then by bounded operators.