

# Self-adjoint extensions with several gaps: scalar-type Weyl functions

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Let  $S$  be the orthogonal sum of infinitely many pairwise unitarily equivalent symmetric operators with non-zero deficiency indices. Further, let  $J$  be the union of disjoint gaps of  $S$ . If there is a self-adjoint extension  $S_0$  of  $S$  such that  $J$  is contained in the resolvent set of  $S_0$  and the associated Weyl function of the pair  $\{S, S_0\}$  is monotone with respect to  $J$ , then for any self-adjoint operator  $R$  there is a self-adjoint extension  $\tilde{S}$  such that the spectral parts  $\tilde{S}_J$  and  $R_J$  are unitarily equivalent.