

## **Operator-valued Mappings**

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We consider different orders on the class  $\mathcal{S}$  of bounded self-adjoint operators on a Hilbert space. Any such order can be used to define a topology on  $\mathcal{S}$ . One of these orders is the spectral order introduced by M.P. Olson in 1971. He proved that the class  $\mathcal{S}$  forms a lattice (which is not a vector lattice) together with the spectral order. In this talk we will review some known facts related to spectral order, discuss various class of functions taking values in  $\mathcal{S}$  and talk about possible directions on the subject.