The ARCS Seminar

An Abstract Characterization for Projections in Operator Systems

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Abstract: Given an abstract operator system V it is not clear how one would go about defining the notion of a projection. During this talk I will present an answer and some recent results on this question. This is done by first considering abstract compression operator systems associated with a positive contraction in V and then determining when we have a realization of V in such an abstract compression operator system. It then follows that there is a one-to-one correspondence between abstract and concrete projections, and in particular, that every abstract projection is a concrete projection in the C^*-envelope of V. I will then conclude with some applications to quantum information theory. In particular, the study of certain correlation sets. This is joint work with Travis Russell (West Point).

Time and Place: Wednesday, September 9 from 4:30–5:30PM (Mountain Time Zone) on MS Teams. Contact Gene Abrams for the invitation link.

The Rings and Wings Seminar is an activity of ARCS.
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