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**Stephanie Prahl\*** (`stephanie.prahl@huskers.unl.edu`). *Determining Hyperrigidity of Operator Systems.*

An operator system  $\mathcal{S}$  that generates a  $C^*$ -algebra  $\mathcal{A}$  is said to be *hyperrigid* in  $\mathcal{A}$  if for every non-degenerate representation  $\pi$  of  $\mathcal{A}$  on a Hilbert space, the only unital completely positive map extending  $\pi|_{\mathcal{S}}$  to  $\mathcal{A}$  is  $\pi$  itself. This notion has strong connections to the non-commutative Choquet boundary of an operator system and its  $C^*$ -envelope. In fact, if an operator system  $\mathcal{S}$  is hyperrigid in  $\mathcal{A}$ , then  $\mathcal{A}$  must be the  $C^*$ -envelope of  $\mathcal{S}$ . This implies that hyperrigidity can be thought of as a property intrinsic to the operator system rather than relative to a  $C^*$ -algebra. We discuss some recent results in determining whether an operator system  $\mathcal{S}$  is hyperrigid in its  $C^*$ -envelope, even if  $\mathcal{S}$  is viewed in a  $C^*$ -algebra that is not the  $C^*$ -envelope. (Received September 17, 2019)