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30332-0160. *On the Horn Conjecture (in many settings)*.

The Horn Conjecture, the Littlewood-Richardson Rule and its numerous equivalent formulations have been studied extensively by matrix theorists, algebraist, and combinatorists for decades. If one considers the ultimate connection to intersection theory in algebraic geometry, the study would go back to centuries. During the last two decades, we studied these problems from an operator theory point of view, in particular, their analogues in various infinite dimensional settings. In order to deal with the infinite dimensional situation, the techniques that we use are combinatorial (to avoid the lack of an infinite dimensional intersection theory) and taking appropriate limits. Our approach also yields insights into the classical setting. In this talk, I will discuss some of our recent results and some open questions. (Received August 22, 2013)