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On the spectral measure of the sum of elements in a finite von Neumann algebra

Given two self-adjoint $n \times n$ matrices A and B with prescribed eigenvalues, the set of all possible spectral distributions for $A + B$ has been conjectured by Horn and proved by Knutson, Tao, Klyachko and Totaro.

We address the same question when A and B have prescribed spectral measures but lie in an arbitrary II_1 factor, and we give elements of answers in terms of inequalities between the spectral measures.