



## Lyapunov's theorem and sampling of continuous frames

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**Abstract:** In this talk we describe several recent developments stimulated by the solution of the Kadison-Singer Problem by Marcus, Spielman, and Srivastava. This includes an extension of Lyapunov's theorem for discrete frames due to Akemann and Weaver and a similar extension for continuous frames by the speaker. We also discuss the discretization problem posed by Ali, Antoine, and Gazeau, which asks whether a continuous frame can be sampled to obtain a discrete frame. This problem was recently solved by Freeman and Speegle using the solution of the Kadison-Singer problem. Generalizations of these results for trace class operator valued measures are also discussed.