1126-46-131 Daniel Freeman* (dfreema7@slu.edu) and Darrin Speegle. The discretization problem for continuous frames and coherent states.

There is a long history of creating frames by sampling coherent states and continuous frames. For instance, Gabor frames are formed by sampling the short time Fourier transform at a lattice. Continuous frames often arise naturally in mathematics and physics, but the sampled frames are usually more useful for computations. Using the results of Marcus-Spielman-Srivastava in their solution of the Kadison-Singer problem, we prove that every bounded continuous frame may be sampled to obtain a frame. This solves the discretization problem as posed by Ali, Antoine, and Gazeau in their textbook: Coherent States, Wavelets, and Their Generalizations. (Received January 09, 2017)