1129-46-308 **Daniel Freeman*** (`dfreema7@slu.edu`) and **Darrin Speegle**. *The discretization problem for continuous frames.*

There is a long history of creating frames for Hilbert spaces by sampling 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 applications and computations. Using the results of Marcus-Spielman-Srivastava in their solution of the Kadison-Singer problem, we solve the discretization problem for continuous frames by characterizing exactly when a continuous frame may be sampled to obtain a frame. In particular, we prove that every bounded continuous frame may be sampled to obtain a frame. (Received March 19, 2017)