1145-46-1699 **Joseph Eisner** and **Daniel Freeman*** (daniel.freeman@slu.edu). *Continuous Schauder frames for Banach spaces.*

Given a Banach space X, a sequence of pairs $(x_j, f_j)_{j\in N}$ is called a Schauder frame of X if

$$x = \sum_{j\in N} f_j(x)x_j \quad \text{for all } x \in X.$$

Instead of using a discrete representation with a series, continuous Schauder frames give a reconstruction formula using an integral. That is, if (M, μ) is a σ-finite measure space and $t \to (x_t, f_t)$ is a measurable map from M to $X \times X^*$ then we say that $(x_t, f_t)_{t\in M}$ is a continuous Schauder frame of X if

$$x = \int_{t\in M} f_t(x)x_t \quad \text{for all } x \in X.$$

We prove that the properties shrinking and boundedly complete may be extended to continuous Schauder frames. Furthermore, every unconditional wavelet for $L_p(R)$ gives rise to a continuous wavelet transform where $1 < p < \infty$. (Received September 24, 2018)