1099-60-277 **Natasha Blitvić*** (nblitvic@indiana.edu) and **Todd Kemp** (tkemp@math.ucsd.edu). *The Segal–Bargmann Transform for (q,t)-Gaussian Spaces.*

Classically, the Segal-Bargmann transform is a unitary isomorphism between the L^2 space of the Gaussian measure on $\mathbb{R}^d$ and the space of holomorphic functions on $\mathbb{C}^d$ that are square-integrable with respect to the complex Gaussian measure. An analogous construction is available in free probability, where, for $d = 1$, the L^2 space of the standard semicircle measure is seen to correspond to the Hardy space of the unit disk. The general free Segal-Bargmann transform (over any separable Hilbert space) was constructed by Biane and extended to the q-Gaussian algebras for $-1 \leq q < 1$ by Kemp. The q-deformed case was also studied in the one-dimensional setting by Maassen and van Leeuwen. In this talk, I will discuss the Segal-Bargmann transform for (q,t)-Gaussian non-commutative probability spaces, which are a combinatorially natural, but non-tracial, generalization of the q-Gaussian spaces. The proofs will draw on explicit combinatorial constructions and a revised two-parameter quantum calculus (compared to physics literature). (Received February 10, 2014)