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**Ryan Saab\*** (rsaab@ucsd.edu), **Rongrong Wang** and **Ozgur Yilmaz**. *Random encoding of quantized compressed sensing measurements.*

Frames generalize the notion of bases and provide a useful tool for modeling the measurement (or sampling) process in several modern signal processing applications. In the digital era, such a measurement process is typically followed by quantization, or digitization. This latter step is often followed by an encoding, or compression, stage.

Recently, compressing the bit-stream generated by Sigma-Delta quantization of random frame coefficients has been considered. It was proven that an encoding step, consisting primarily of a discrete Johnson-Lindenstrauss embedding of the quantized coefficients, yields near-optimal approximation accuracy as a function of the number of bits used.

In this talk, we show that if the same encoding scheme is applied to quantized compressed sensing measurements (with a different reconstruction scheme implemented using convex optimization), it also yields near-optimal approximation accuracy as a function of the bit-rate. (Joint work with Rongrong Wang and Ozgur Yilmaz.) (Received September 16, 2014)