1133-37-273 **Doğan Çömez*** (dogan.comez@ndsu.edu), Minard Hall 408 E24, Fargo, ND 58108, and **Mrinal K Roychowdhury** (mrinal.roychowdhury@utgrv.edu), 1201 West University Dr., Edinburg, TX 78539. *Quantization for the condensation system associated with inhomogeneous self-similar measures.*

A condensation system is a triple $(\{S_i\}_{i=1}^n, \overrightarrow{p}, \nu)$, where each $S_i : \mathbb{R}^d \to \mathbb{R}^d$ is a contraction, $\overrightarrow{p} = (p_1, \ldots, p_n)$ is a probability vector, and ν is a probability measure on $\mathbb{R}^d$ with compact support. Let P be an inhomogeneous self-similar measure associated with this system. Such a measure is of the form

$$P = \sum_{i=1}^{n} p_i P \circ S_i^{-1} + \nu,$$

and has a unique compact support. Various properties of these measures, such as L_p-spectra and Renyi dimensions, have been studied recently. In this talk will focus on the optimal sets of n-means and n-th quantization error for a measure of this type. Furthermore, we will show that the quantization dimension of the measure P exists and is equal to the quantization dimension $D(\nu)$ of the measure ν. It turns out that the $D(\nu)$-dimensional quantization coefficient for P does not exist. (Received July 28, 2017)