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Josef Sifuentes* (josef.sifuentes@utrgv.edu), Mathematics, 1201 West University Dr., Edinburg, TX 78539, and **Mrinal Roychowdhury** and **Santanu Chakraborty**. *High precision numerical computation of principal points for univariate distributions*. Preliminary report.

Quantization for probability distributions concerns the best approximation of a probability measure P defined on a metric space by a measure supported on a finite number of points, or in other words, the best approximation of a d -dimensional random vector X with distribution P by a random vector Y with at most n -values in its image. In this paper, we determine the optimal sets of n -means and the n th quantization errors for different values of n for some common univariate absolutely continuous distributions. (Received February 13, 2018)