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Mrinal Kanti Roychowdhury*, 1201 West University Drive, Edinburg, TX 78539.

Quantization for Probability Distributions.

Quantization deals with the approximation of continuous objects (i.e. probability distributions) by finite objects (finite sets of points). This area has its origin in engineering and is driven by various applications in communication, information theory, signal processing and data compression. During the last twenty years mathematicians have started working on the development of a rigorous mathematical theory, and quantization is nowadays an active area of mathematical research. Natural problems of study are to obtain for a given distribution a best approximation for a fixed number of points, and to understand the asymptotic error rate. I will talk about it. (Received September 10, 2019)