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**Kiseop Lee\*** ([kiseop.lee@louisville.edu](mailto:kiseop.lee@louisville.edu)), Department of Mathematics, Louisville, KY 40292, and **Mingxin Xu**. *Parameter Estimation from Multinomial Trees to Jump Diffusions with K Means Clustering.*

Ever since the pioneering work of Cox, Ross and Rubinstein, tree models have been popular among asset pricing methods. On the other hand, statistical estimation of parameters of tree models has not been studied as much. In this paper, we use K Means Clustering method to estimate the parameters of multinomial trees. By the weak convergence property of multinomial trees to continuous-time models, we show that this method can be in turn used to estimate parameters in continuous time models, illustrated by an example of jump-diffusion model. (Received January 25, 2010)