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Yujia Ding* (yujia.ding@cgu.edu) and **Qidi Peng** (qidi.peng@cgu.edu). *Series Representation of Jointly SaS Distributions via Generalized Covariations.*

We introduce a new measure of dependency between coordinates of a symmetric α -stable random vector that we call the generalized covariation. We show that these covariations can be represented via a new type of fractional derivative and can be used to fully characterize the joint distribution of bi-variate symmetric α -stable variables. (Received September 16, 2018)