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Rui Huang* (huangr@me.com), 1455 NE BRANDI WAY DD104, PULLMAN, WA 99163. *Nested Archimedean Copulas and Tail Dependences.*

In probability theory, a copula is defined as a joint multivariate distribution where each of its margins is uniform and has been widely studied and applied in the risk management and actuarial world. People in this field believe that the devil is in the tail and we endeavor to watch tail dependence very closely.

In this paper, I will start with the definition, properties, tail dependence structures, advantages and limitations of copulas, and then progress to focus on Archimedean copulas and its hierarchical structure which is often referred as nested Archimedean copulas.

Data were simulated under both hierarchical and non-hierarchical structures, in contrast with the enhancement in tail dependence coefficients.

The degree of influence/stress of the inner and outer parameters that are exerting on the dependence structure of the nested Archimedean copulas will also be explored. (Received February 12, 2017)