

1135-VT-1398 **Suttisak Wisadwongsa***, 239 Huaykaew road, Tumbol Suthep, Amphur muang, Chiang Mai, 50200, Thailand, and **Santi Tasena**. *Bivariate Quadratic Copula Constructions*.

In this work, we present the concept of quadratic copula constructions using two arbitrary copulas. We characterize all quadratic polynomials of four variables whose composition with any two copulas always results in a copula. We show that these polynomials form a closed convex set in a seven-dimensional vector space. We also apply the result to obtain a new family of copulas. (Received September 21, 2017)