

**Meeting:** 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

1003-60-1198      **Roger B. Nelsen\***, Department of Mathematical Sciences, Lewis & Clark College, MSC 110, Portland, OR 97219-7899, **José Juan Quesada Molina**, Universidad de Granada (Spain), and **José Antonio Rodríguez Lallena** and **Manuel Úbeda Flores**, Universidad de Almería (Spain). *Kendall Distribution Functions*.

If  $X$  and  $Y$  are continuous random variables with joint distribution function  $H$ , then the Kendall distribution function of  $(X, Y)$  is the distribution function of the random variable  $H(X, Y)$ . Kendall distribution functions arise in the study of stochastic orderings of random vectors, and can be viewed as a two-dimensional analog of the probability integral transform. We discuss the relationship of this distribution to the population version of Kendall's tau, dependence orderings, and certain positive dependence properties. (Received October 04, 2004)