

1023-60-970

Walfredo R Javier* (Walfredo_Javier@subr.edu), Mathematics Department, TT Allain Bldg, Southern University-BR, Baton Rouge, LA 70813, and **Arjun K Gupta** (gupta@bgsu.edu), Mathematics and Statistics Department, Bowling Green State University, Bowling Green, OH 43403-0221. *Mutual Information for a Multivariate T-Distribution*. Preliminary report.

Mutual Information for a $(q \times 1)$ random vector X is defined as the Expectation of the natural logarithm of the ratio of density function of X to the product of the marginal densities of the components of X . It measures the dependence among the components of X . This paper derives the Mutual information for a Multivariate t distribution as a function of its parameters q and its degrees of freedom (Received September 23, 2006)