Abeer Hasan* (statlover0.05@hotmail.com), 853 Napoleon Rd, Apt 9, Bowling Green, OH 43402. Flexible Families of Skew T Distributions with Applications. Preliminary report.

Skew t distributions outperform the skew normal distribution in fitting fat tailed data and provide a promising alternative to model financial and environmental data. In this talk I will present a new approach to generate a more flexible family of skew t distributions. Some theoretical properties of the resulting family of distributions will be discussed, and some examples of applications in data analysis will be presented. The multivariate form of this distribution will be discussed briefly with some results on special cases of the parameters. Finally, I will talk about more generalized forms of skew t distributions that can be used to fit data.

Abeer Hasan (Received September 17, 2012)