1035-60-85 **Radoslav Dimitric*** (dimitricr@member.ams.org), P.O. Box 382, Pittsburgh, PA 15230.
Standardized conditional expectation and its applications in finance. Preliminary report.

Given random variables X, Y, we call the following expression

$$SCE[X|Y=y] = \frac{E[X|Y=y] - E[X]}{Cov(X,Y)}$$

the standardized conditional expectation We believe this to be an importat notion, deeper understanding of which is highly desirable and this paper is a move in that direction. Equally importantly there are good applications, one of them to finance, such as CAPM (the capital asset pricing model) and its generalizations. (Received July 18, 2007)