1108-60-263 **Mark Meerschaert** and **Farzad Sabzikar*** (`sabzika2@stt.msu.edu`), East Lansing, MI 48824.
Stochastic Integration for Tempered Fractional Brownian Motion.

Tempered fractional Brownian motion is obtained when the power law kernel in the moving average representation of a fractional Brownian motion is multiplied by an exponential tempering factor. We develop the theory of stochastic integrals for tempered fractional Brownian motion. Along the way, we develop some basic results on tempered fractional calculus. (Received January 15, 2015)