1116-35-2033   **Mae L Markowski*** (`mmarkows@masonlive.gmu.edu`), Fairfax, VA 22030. *A fractional diffusion model for electric signal propagation through cardiac muscle tissue.*

It is well known that cardiac muscle tissue is heterogenous. However, the standard model used to describe electric current propagation in cardiac muscle tissue, an extension of the diffusion equation, assumes the tissue is perfectly homogenous. We propose a fractional space-time diffusion model, which will better account for the spatial complexity of the region. (Received September 21, 2015)