1145-45-537 **Paul W Eloe** and **Jeffrey T Neugebauer***, jeffrey.neugebauer@eku.edu. *An Avery Fixed Point Theorem applied to a Hammerstein Integral Equation.*

We apply a recent Avery *et al.* fixed point theorem to a Hammerstein integral equation

$$x(t) = \int_{T_1}^{T_2} G(t,s) f(x(s)) \mathrm{d}s, \quad t \in [T_1, T_2].$$

Under certain conditions on G, we show the existence of positive solutions and the existence of positive symmetric solutions. The function G is related to Green's functions for different boundary value problems. The existence of positive solutions of these boundary value problems is obtained. (Received September 09, 2018)