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**Eric R Kaufmann\*** (erkaufmann@ualr.edu), Department of Mathematics & Statistics,  
University of Arkansas Little Rock, 2801 S. University Ave, Little Rock, AR 72204. *Existence of  
solutions for a second order iterative boundary value problem.* Preliminary report.

We consider the existence of solutions to the second order iterative boundary value problem

$$x''(t) = f(t, x(t), x^{[2]}(t)).$$

with solutions satisfying the boundary conditions  $x(a) = a$  and  $x(b) = b$ . Here  $x^{[2]}(t) = x(x(t))$ . We use the Schauder fixed point theorem to establish our main results. This is a preliminary report. (Received February 10, 2017)