1163-34-1435 **Christopher S Goodrich*** (c.goodrich@unsw.edu.au), School of Mathematics and Statistics, UNSW Sydney, The Red Centre, Room 2070, Sydney, 2052, Australia. *A Topological Approach to Nonlocal Boundary Value Problems.*

We consider nonlocal convolution equations of the general form

$$\begin{aligned} A\left(\int_{[0,1]}(g\circ u)(s)\ d\alpha(s)\right)\big(a*u''\big)(t)+\lambda f\big(t,u(t)\big)=0, \quad t\in(0,1)\\ u'(0)=0\\ u(1)=T. \end{aligned} \tag{1}$$

The existence of at least one positive solution is shown by means of topological fixed point theory, facilitated by the use of a nonstandard order cone. Applications to fractional differential equations are considered. (Received September 15, 2020)