1146-35-442 **Maya Chhetri, Petr Girg** and **Elliott Hollifield***, Department of Mathematics and Statistics, UNC Greensboro, Greensboro, NC 27403. *Positive weak solutions of fractional Laplacian boundary* value problems.

We present a sub- and supersolution method for fractional Laplacian boundary value problems. Using this method, we establish existence of positive weak solutions with nonlinearities satisfying a sublinear condition at infinity. We present numerical experiments that verify our theoretical results. (Received January 28, 2019)