1025-34-234 **Ebene Mboumi*** (exmboumi@ualr.edu), 2801 S. University Ave., Department of Mathematics and Statistics, University of Arkansas at Little Rock, Little Rock, AR 72204, and **Eric R. Kaufmann** (erkaufmann@ualr.edu), 2801 S. University Ave., Department of Mathematics and Statistics, University of Arkansas at Little Rock, Little Rock, AR 72204. *Existence of positive solutions of nonlinear fractional differential equations.* Preliminary report.

In this paper we consider the nonlinear fractional equation

$$D^{\alpha}u + f(t,u) = 0, 0 < t < 1, 1 < \alpha \leq 2,$$
$$u(0) = 0,\ u'(1) = 0,$$

where D^{α} is the standard Riemann-Liouville differential operator of order α and $f : [0,1] \times [0,\infty) \to [0,\infty)$ is a given positive and continuous function. (Received January 23, 2007)