1051-39-160 **Rajendra Dahal*** (rdahal@coastal.edu), Departement of Mathematics and Statistics, Coastal Carolina University, P.O. Box 261954, Conway, SC 29528. *Existence of positive solutions of semipositone dynamic boundary value problems.*

abstract

In this talk, using well known fixed points theorem, I will show the existence of positive solutions for the following second-order singular semipositone boundary value problem:

$$-x^{\Delta\nabla} = f(t,x) + g(t,x), \qquad t \in (\rho(a), \sigma(b))$$

$$x(\rho(a)) = 0 = x(\sigma(b)),$$

where $f(t,x) \geq 0$, and g may change sign. (Received August 24, 2009)