Positive solutions of functional differential equations

SORIN BUDIŞAN

ABSTRACT. We study the existence of positive solutions of the equation
$$u''(t) + a(t)\ f(u(g(t))) = 0,\ 0 < t < 1$$
with linear boundary conditions.We show the existence of at least one positive solution if f is either superlinear or sublinear by an application of a fixed point theorem in cones.

BABEŞ-BOLYAI UNIVERSITY
DEPARTMENT OF APPLIED MATHEMATICS
400084 CLUJ-NAPOCA, ROMANIA
E-mail address: sorinbudisan@yahoo.com