1124-34-347 **M N Nkashama***, Mathematics Department, Birmingham, AL 35294-1170, and **N Mavinga**, Department of Mathematics and Statistics, Swarthmore, PA 19081. *Bifurcation from infinity and multiplicity of solutions for nonlinear second order periodic boundary value problems.* Preliminary report.

We shall present bifurcation and multiplicity results at higher eigenvalues for periodic solutions of nonlinear perturbations of second order linear differential equations with periodic boundary conditions. Since higher eigenvalues have even multiplicity (specifically, multiplicity two) and associated eigenfunctions are oscillatory, some care is taken to study the problem when the bifurcation parameter varies in a nontrivial continuum about the eigenvalues and the nonlinearity is not necessarily smooth. The proofs are based on *a priori* estimates, degree theory, variational arguments, continuation methods and bifurcation from infinity techniques. (Received September 13, 2016)