

1132-35-30

Maya Chhetri* (maya@uncg.edu), Department of Mathematics and Statistics, 125 Petty Building, Greensboro, NC 27402. *On a class of asymptotically linear systems.*

We will consider a class of asymptotically linear elliptic system with zero Dirichlet boundary condition. We will discuss the existence of unbounded connected components of the solution set and investigate the nodal properties of solutions on these components. As a consequence, we infer the existence and multiplicity of solutions in a neighborhood of the bifurcation parameter containing the simple eigenvalue of the associated eigenvalue problem. (Received June 29, 2017)