A semilinear elliptic problem involving sign-changing weight function

Tsung-fang Wu
Department of Applied Mathematics
National University of Kaohsiung, Kaohsiung 811, Taiwan

Abstract. In this talk, we will consider the combined effects of concave and convex nonlinearities on the number of nontrivial nonnegative solutions for semilinear elliptic problems involving sign-changing weight function. With the help of the Nehari manifold, we prove that the existence of multiple positive solutions for semilinear elliptic problems.