Wenying Feng* (wfeng@trentu.ca), Peterborough, ON, Canada, and Ankai Liu. Existence of Solutions for Integral Equations with Changing Sign Green's Functions.

We will introduce a new class of cone as a generalization of the compression cone technique for fixed-point index. As a result, the traditional method is shown to be more adaptable in applications. We prove new results for semi-linear integral equations. Applications are illustrated by examples. Limitations of such new method are also discussed. (Received September 16, 2018)