On a kind of nonlinear eigenvalue problem

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Time: 1 pm – 2 pm
Venue: SPMS-Executive Classroom 2, MAS-03-07
School of Physical and Mathematical Sciences

By using of critical point theory, we deal with a kind nonlinear eigenvalue problem:

$$\left\{\begin{array}{l}
-\Delta u - \lambda u = f(x,u) \quad x \in \Omega \subset \mathbb{R}^N, \quad \|u\|_{\Omega} = 0 \\
q \hbox{on} \quad \partial \Omega \\
\int_{\Omega} |\nabla u|^2 - \lambda \int_{\Omega} u^2 = \alpha
\end{array}\right.$$

and obtain some multiple and sign-changing solutions.

Speaker Biography

Prof. Yongqing Li is currently a professor in the School of Mathematics and Computer Science, Fujian Normal University, Fuzhou, China. He obtained his PhD from Stockholm University in 1994. His research interests include nonlinear analysis and calculus of variations (critical point theory and its application to problems of nonlinear elliptic PDEs).

Host: Prof. Wang Huaxiong, Division of Mathematical Sciences, School of Physical and Mathematical Sciences

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