SHARP BOUNDS OF LOWEST POSITIVE PERIODIC EIGENVALUE FOR GENERAL INDEFINITE STURM-LIOUVILLE PROBLEMS

Speaker: Chu Jifeng
Shanghai Normal University

Time：Sun, Dec 11, 15:00-16:00

Tencent room：570-135-223   **Code**：200433

Abstract：We aim to obtain the sharp estimates for the lowest positive periodic eigenvalue of a general Sturm-Liouville problem with an indefinite potential. A typical example of such problems is the well-known Camassa-Holm equations with indefinite potentials. It is shown that the solution of the minimization problem of the lowest positive periodic eigenvalue will lead to more general distributions of potentials which have no densities with respect to the Lebesgue measure. As a result, it is very natural to choose the general setting of the measure differential equations to understand the eigenvalues and their minimization.