

## A Unified Optimality Condition for Eigenvalue Problems

W. B. Liu; J. E. Rubio

*Abstract:* An optimality condition is derived for the problem of maximization of the first eigenvalue of an abstract elliptic differential operator in a Hilbert space. This condition unifies some known criteria in optimal design and gives some new ones as well. The result is obtained by using some techniques of nonsmooth optimization.

*Keywords:*

*AMS Subject Classification:*