

臺灣大學數學系演講

Inverse Problems Seminar

演講者 : Professor Yueh-Cheng Kuo (Director, Institute of Statistics, National University of Kaohsiung)

講題 : Quadratic Model Updating with No Spill-over and Incomplete Measured Data

時間 : 2011年11月9日 (星期三) 14:20~15:20

地點 : 臺灣大學天文數學館 305 室

摘要 : Quadratic Finite Element Model Updating Problem (QFEMUP) is concerned with updating a symmetric nonsingular quadratic pencil in such a way that, a small set of measured eigenvalues and eigenvectors is reproduced by the updated model. If in addition, the updated model preserves the large number of unupdated eigenpairs of the original model, the model is said to be updated with no spill-over.

In this talk, we first (i) prove a set of necessary and sufficient conditions for the existence of a solution of the no spill-over QFEMUP, then (ii) present a parametric representation of the solution, assuming a solution exists and finally, (iii) propose an algorithm for QFEMUP with no spill-over and incomplete measured eigenvectors.

主辦人 : 王振男 <http://www.math.ntu.edu.tw/~jnwang/ipseminar.htm>