IMPROVING EIGENPAIRS FROM AMLS WITH SUBSPACE ITERATIONS

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Abstract

Automated Multi-Level Sub-structuring (AMLS) is a very efficient condensation method for determining a large number of eigenmodes and frequency responses for quite large and complex structures. Compared to the classical block Lanczos method AMLS reduces computational resources in terms of time and hardware requirements. However, the accuracy of AMLS is often not very high. In this talk we discuss how to improve the obtained eigenpairs with subspace iteration taking advantage of transformed stiffness matrix from AMLS.