

ZZZZ351 – Validation order ELIM_LAGR

Summary:

This test validates the order ELIM_LAGR who allows to remove in a matrix the equations corresponding to the dualized linear relations.

There is only one modeling (A).

1 Principle of the test

With the dealt problem is that of the research of the first Eigen frequencies of a mechanical structure. The reference solution is obtained by the operator `CALC_MODES` starting from the "complete" matrices (with the equations of Lagrange).

The second calculation uses the order `ELIM_LAGR` "to reduce" the matrices of rigidity and mass and a modal calculation with these reduced matrices carries out.

2 Summaries of the results

It is checked that the Eigen frequencies obtained are the same ones.