A K_m proportional damping for dynamic relaxation

Ante Munjiza

University of London, QMW Department of Engineering, Mile End Road, London E1 4NS, England, U.K.

SUMMARY

Dynamic relaxation has proved a viable alternative to direct solvers for certain classes of solid mechanics problems. However, the performance of dynamic relaxation, both in terms of convergence rate and overshooting, is greatly influenced by the choice of mass and damping matrices. In this paper some classical formulations for the damping matrix in the context of dynamic relaxation are investigated and a comparison to the so called K_m proportional damping is made.