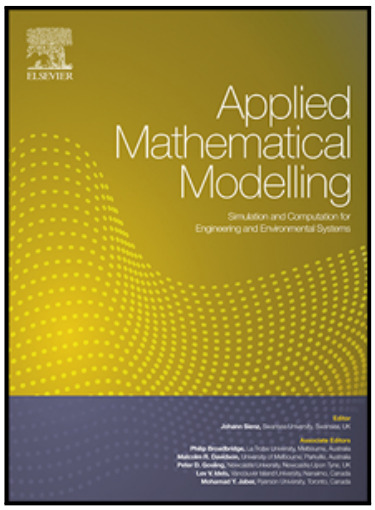

A new updating method for the damped mass-spring systems

Kang Zhao, Lizhi Cheng, Shengguo Li, Anping Liao

PII: S0307-904X(18)30234-8
DOI: 10.1016/j.apm.2018.05.024
Reference: APM 12288

To appear in: *Applied Mathematical Modelling*

Received date: 8 September 2017
Revised date: 13 May 2018
Accepted date: 21 May 2018

Please cite this article as: Kang Zhao, Lizhi Cheng, Shengguo Li, Anping Liao, A new updating method for the damped mass-spring systems, *Applied Mathematical Modelling* (2018), doi: 10.1016/j.apm.2018.05.024

Highlights

- We consider the inverse eigenvalue problem of damping mass-spring system.
- A new direct updating method for mass-spring system is provided.
- The updated model preserves the positive semi-definiteness and sparsity simultaneously.
- The physical parameters of the updated stiffness preserve nonnegative.