

PNLSS Identification

Post Institute Meeting 2

Nidish Narayanaa Balaji

Rice University, Houston, TX 77005

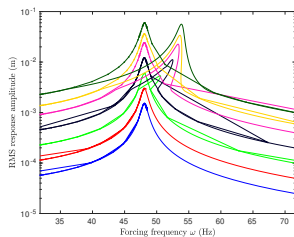
September 26, 2019

PNLSS for Benchmark 5 (unilateral spring)

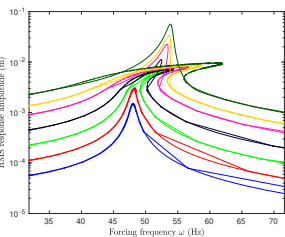
- ▶ A HCB reduced model was used for the transient simulations for computational tractability

PNLSS for Benchmark 5 (unilateral spring) I

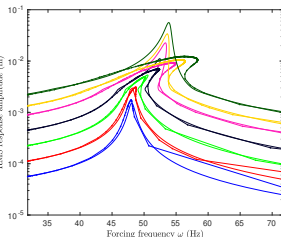
Number of states: 2; Nonlinearity order: [2, 3]



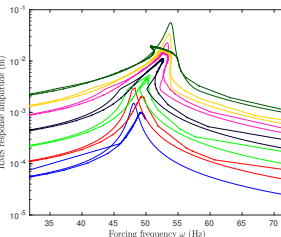
(a) $A=15$ N



(b) $A=30$ N

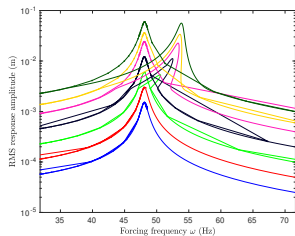


(c) $A=60$ N

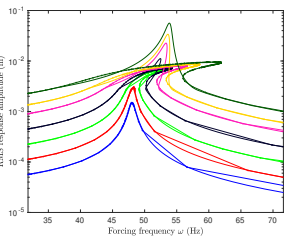


(d) $A=120$ N

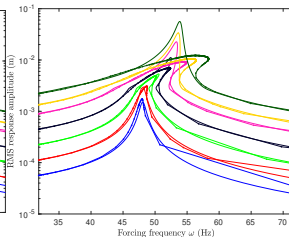
PNLSS for Benchmark 5 (unilateral spring) I



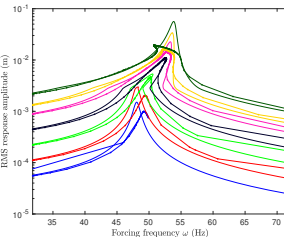
(a) $A=15$ N



(b) $A=30$ N



(c) $A=60$ N



(d) $A=120$ N