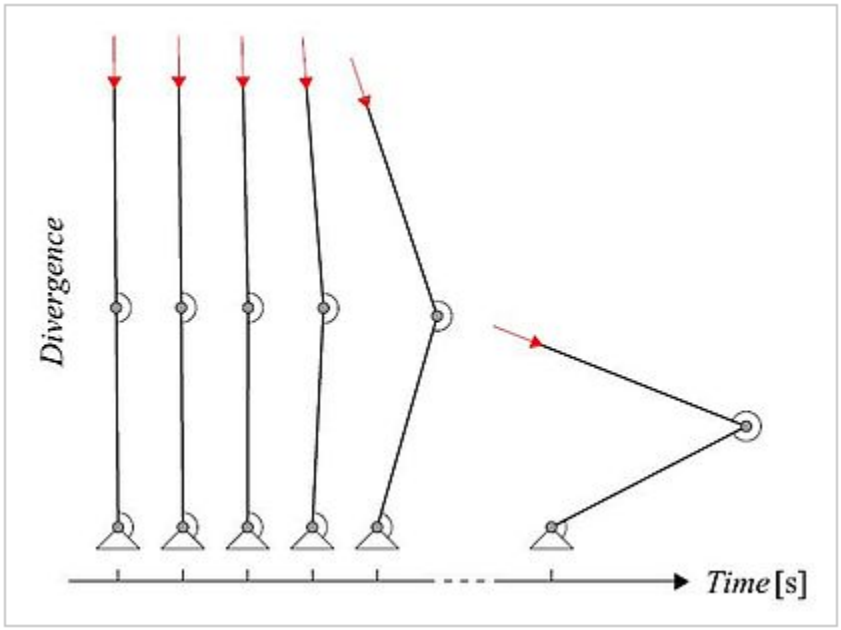
Buckling

Buckling occurs physically when a structure becomes unstable under a given loading configuration, and mathematically when a bifurcation occurs in the solution to equations of static equilibrium. The two primary means for performing buckling analysis include Eigenvalue and Nonlinear buckling analyses. Buckling must be explicitly evaluated for each set of loads considered because, unlike natural frequencies, buckling modes are dependent upon a given load pattern. When evaluating buckling, any number of load cases may be defined, each of which should specify loading, convergence tolerance, and the number of modes to be found. Since the first few buckling modes may have similar factors, we recommend finding a minimum of six modes.

Additional information is available in the CSI *Analysis Reference Manual* (Chapter XVII Load Cases, Linear Buckling Analysis).



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