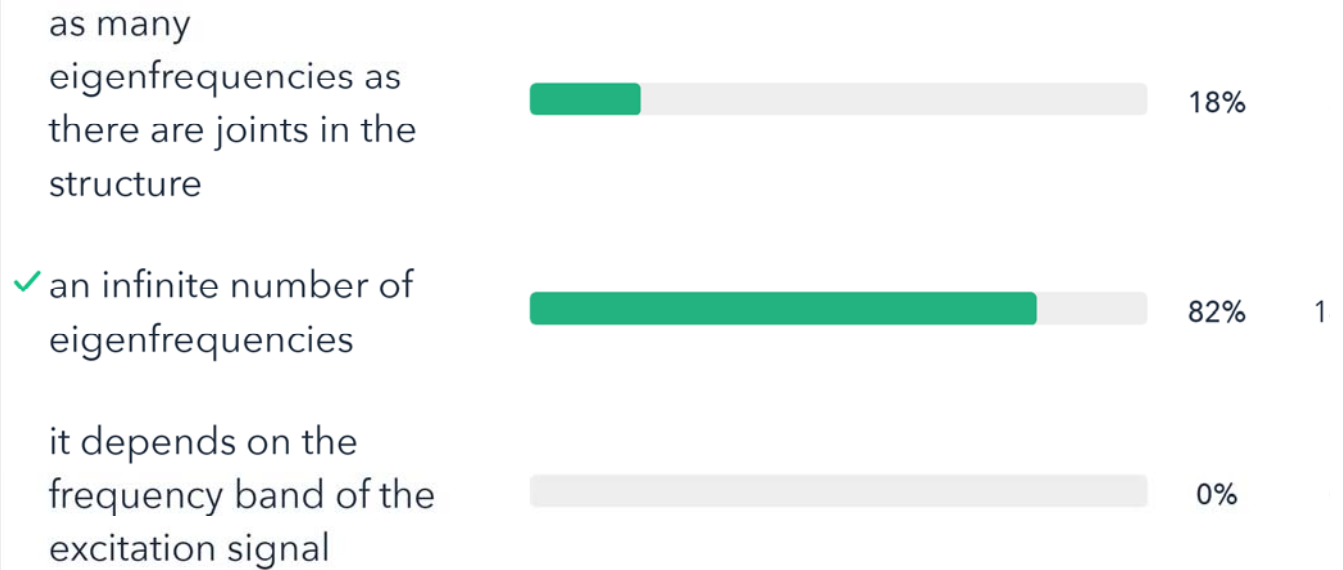


DOS2018_Continuous_Syste

Number of participants: 25


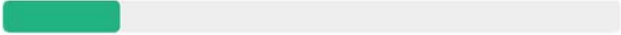
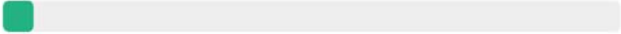
1

A continuous system has



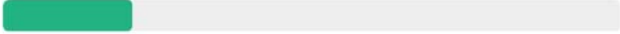
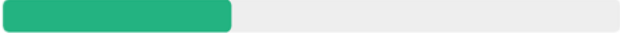
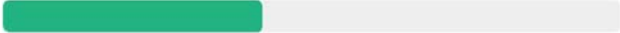
2

Modal truncation consists in

- ✓ computing the response of a system using only the modes which are excited by the external forces  76% 1
- computing the response of a system using only the first 5 modes  19%
- using a truncation of the Fourier series of the excitation signal  5%

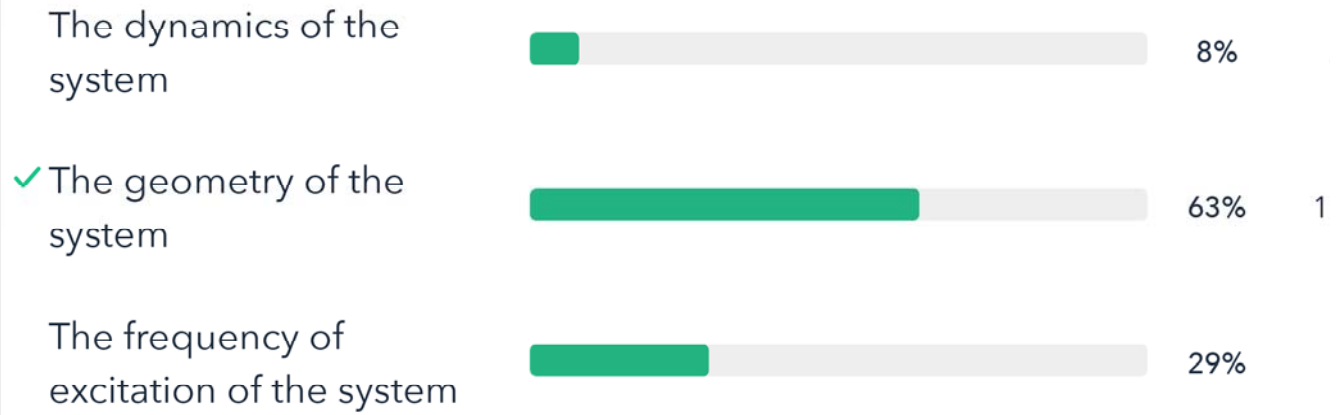
3

For footbridges, the dependency of the first natural frequency is proportional to

$1/L^2$ (L is the span)		21%
$1/L^3$		37%
✓ $1/L$		42%

4

In practice, the number of dofs in a finite element is usually dictated by



5

Hysteretic damping models can be used

