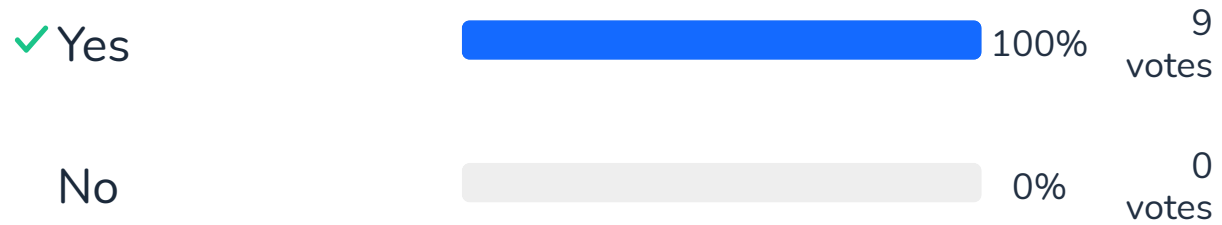


# DOS 2021 : Flow induced vibrations

Number of participants: 10

1

I have watched the video on  
flow induced vibration



2

Which type of flow induced vibrations does this schematic represent ?

Vortex induced vibrations

Galopping

Vortexes

Vortex excitation

Self excitation vibration-divergence

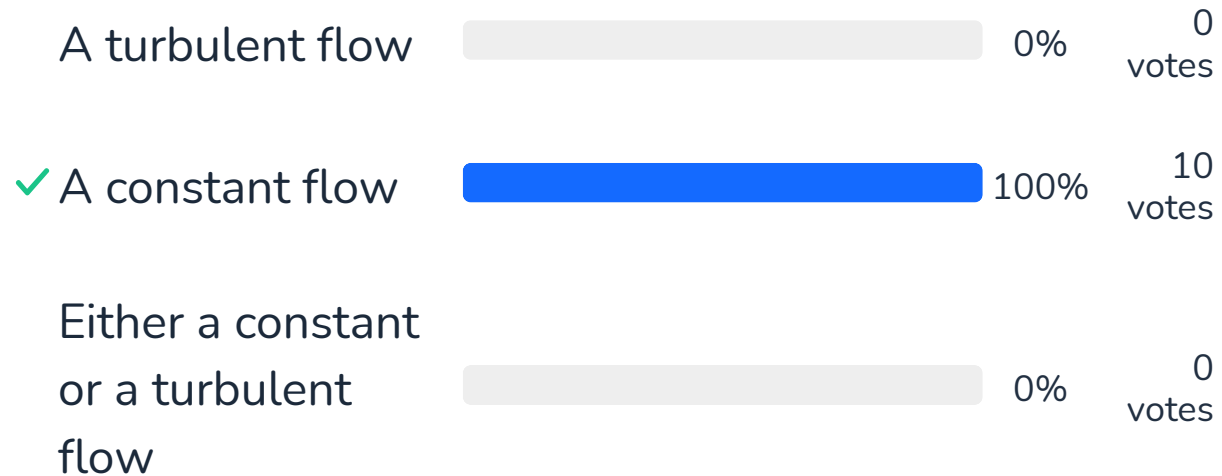
Turbulent, sinous

Vortex

Vortices

3


## Vortex induced vibrations is caused by



4

When a cylinder is excited by VIV it vibrates in the direction

of the flow  11% 1 vote

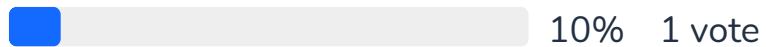
which depends on the shape of the object  11% 1 vote

✓ perpendicular to the flow  78% 7 votes

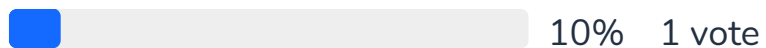
5

In self-excited vibrations, the force  $F_f$  due to the flow is a function of

the displacement of the flexible object



the velocity of the flexible object

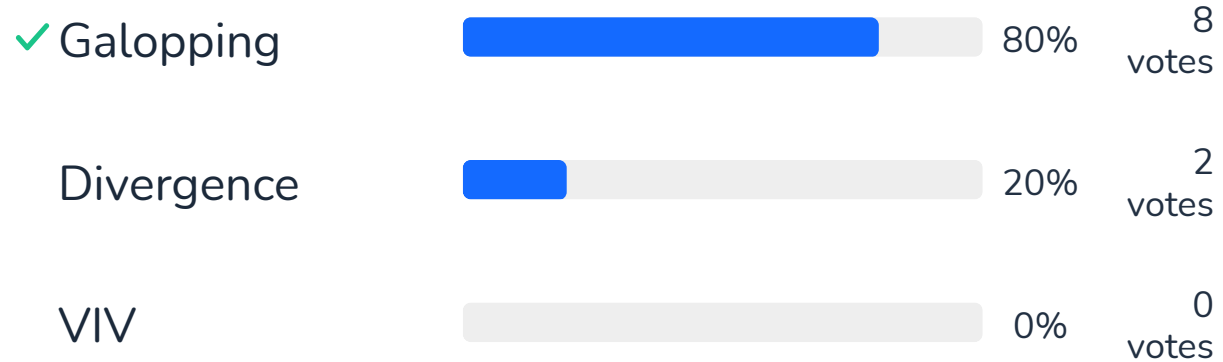


✓ both the displacement and the velocity of the flexible object



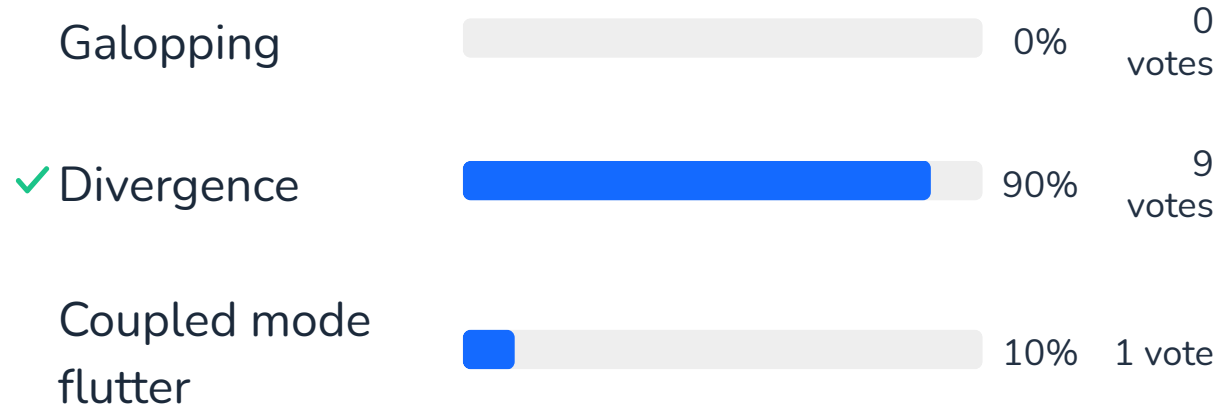
6

This is an example of



7

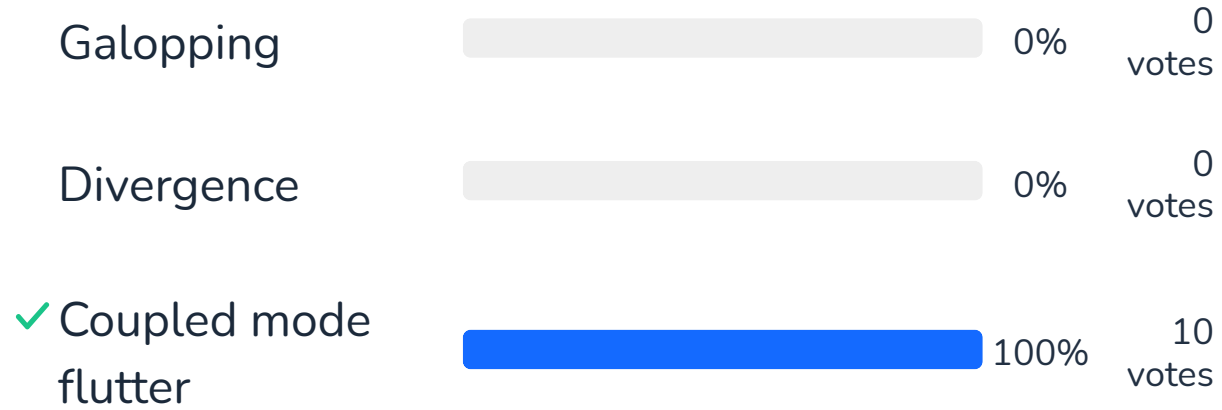
This is an example of instability in the form of





8

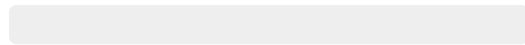
This is an example of instability in the form of



9

For a cylinder in a flow, the Strouhal number is a function of

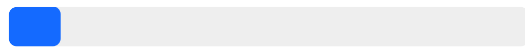
The diameter of the cylinder



0%

0 votes

The wind velocity



10%

1 vote

✓ Both the diameter of the cylinder and the wave velocity



90%

9 votes

