

Today we will dive deeper into the spring-mass oscillations.

To do List

1. Watch the videos on undamped systems, take detailed notes then and attempt problem 1.

NOTE: I will not collect the worksheet problems. These problems are meant to check your understanding and generate questions to ask me during office hours if you get stuck.

Objectives

By the end of this lecture you should be able to

1. Set up a second order system describing undamped spring-mass systems and solve them.

Problems

1. A spring with a $4 - kg$ mass has a natural length of 1metre , and is maintained stretched to a length of 1.3metres by a force of $24.3N$. If the spring is compressed to a length of 0.8 and then released with zero velocity, find the position function. Assuming no damping.

Reading

Pages 147-149.

Have a good weekend!