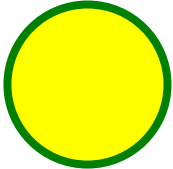


Rolf Becker (rolf001) - Public Page

rolf001

Please go to my report under **GROUP Z!**

testing



Introduction

Railways induce heavy vibrations on nearby structures. Continuous monitoring is paramount to assess the structural integrity.

Therefore ...

Methods and Materials

Arduino UNO R3



Math of Oscillation

We assume that an attenuated harmonic oscillation $A(t)$ can be described as:

$$A(t) = A_0 e^{-t/t_0} \sin(\omega t + \phi) \quad ; \quad t \geq 0$$

$$A(t) = A_0 e^{-t \text{ over } t_0} \sin(\omega t + \phi) \quad ; \quad t \geq 0$$

$$A(t) = A_0 e^{\frac{-t}{t_0}} \sin(\omega t + \phi) \quad ; \quad t \geq 0$$

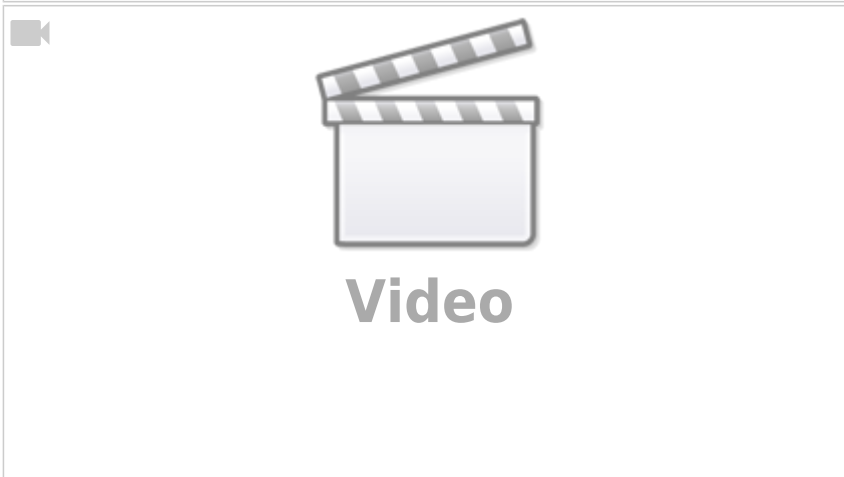
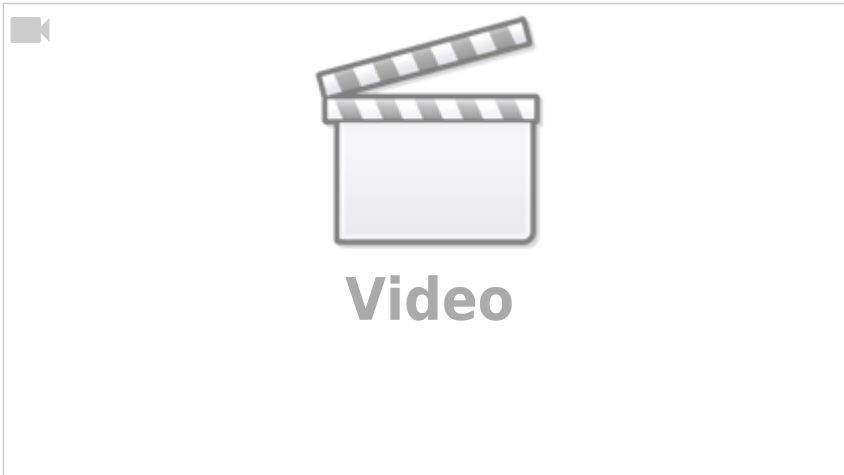
Results

Discussion

Outlook

<https://www.amazon.de/Bartagamen-Wohlf%C3%BChl-Garantie-kleine-Echsen-Tierratgeber/dp/3833852186/>

A nice Video



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