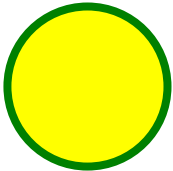


# Rolf Becker (rolf001) - Public Page

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:

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

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

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

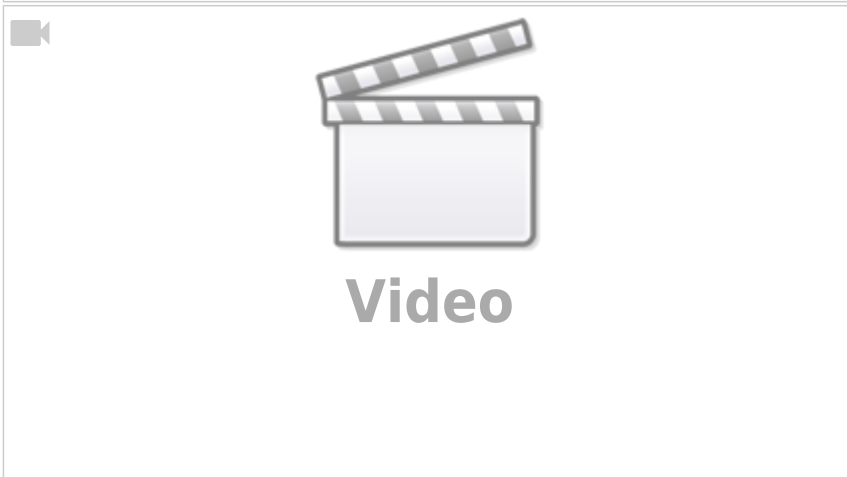
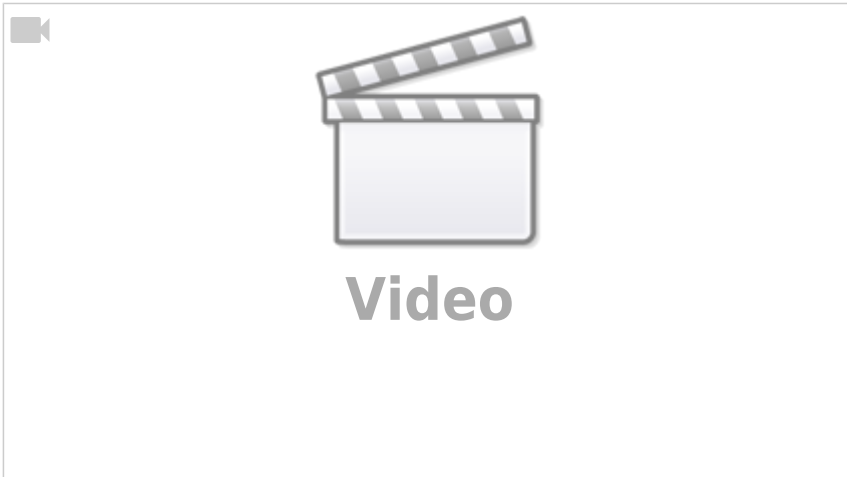
## Results

## Discussion

# Outlook

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

## A nice Video



[group\\_f](#)

From:  
<https://student-wiki.eolab.de/> - **HSRW EOLab Students Wiki**

Permanent link:  
<https://student-wiki.eolab.de/doku.php?id=user:rolf001&rev=1634732622>

Last update: **2023/01/05 14:38**

