

# Rolf Becker (rolf001) - Public Page

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[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:

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

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

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

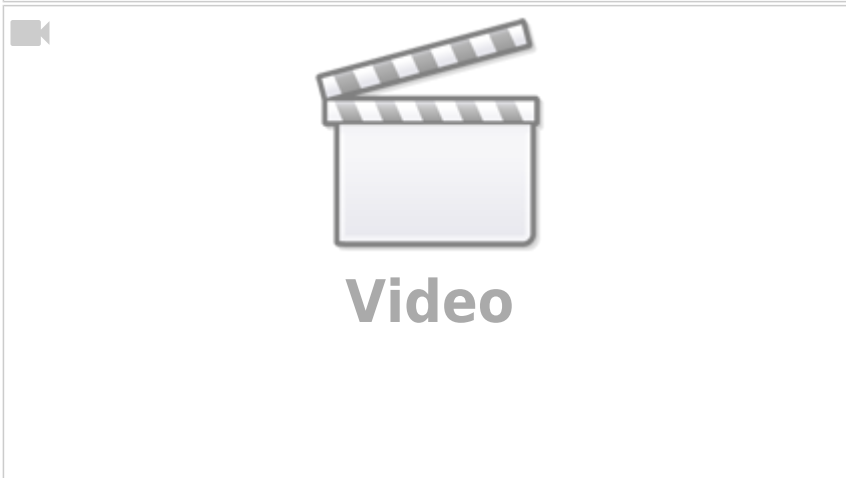
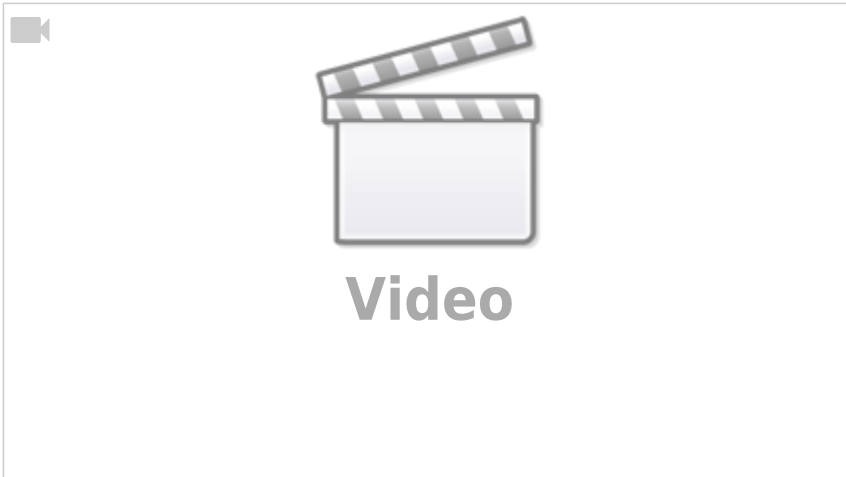
## Results

## Discussion

## Outlook

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

## A nice Video



group\_f

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