ETH zürich | Physikalisches Praktikum der ETH Zürich | Physics Lab

Name 1 Datum:

Name 2 Platz-Nr:

04 - Transverse Oscillation of a String

Driving frequency ν = ... Mass per unit Length μ = ...

Lever Arm Ratio $\frac{\text{force } Z}{\text{weight } G}$ = 2:1

Precision of the Micrometer Screw Reading

Person 1: a =.....

Person 2: a =.....

<a>(Person 1) = ... <a>(Person 2) = ...

Are the mean values of the amplitude compatible?

Resonance curve

l = ...

mass m	force Z	amplitude A	mass m	force Z	amplitude A

Graphical representation: $A = f(\sqrt{Z})$!

Force Z at resonance for variable string lengths l

l [cm]	m	Z	ν_1	l [cm]	m	Z	ν_1
36				46			
38				48			
40				50			
42				52			
44				54			

Graphical representation: $Z = f(l^2)$! $<\nu_1>$ = ...