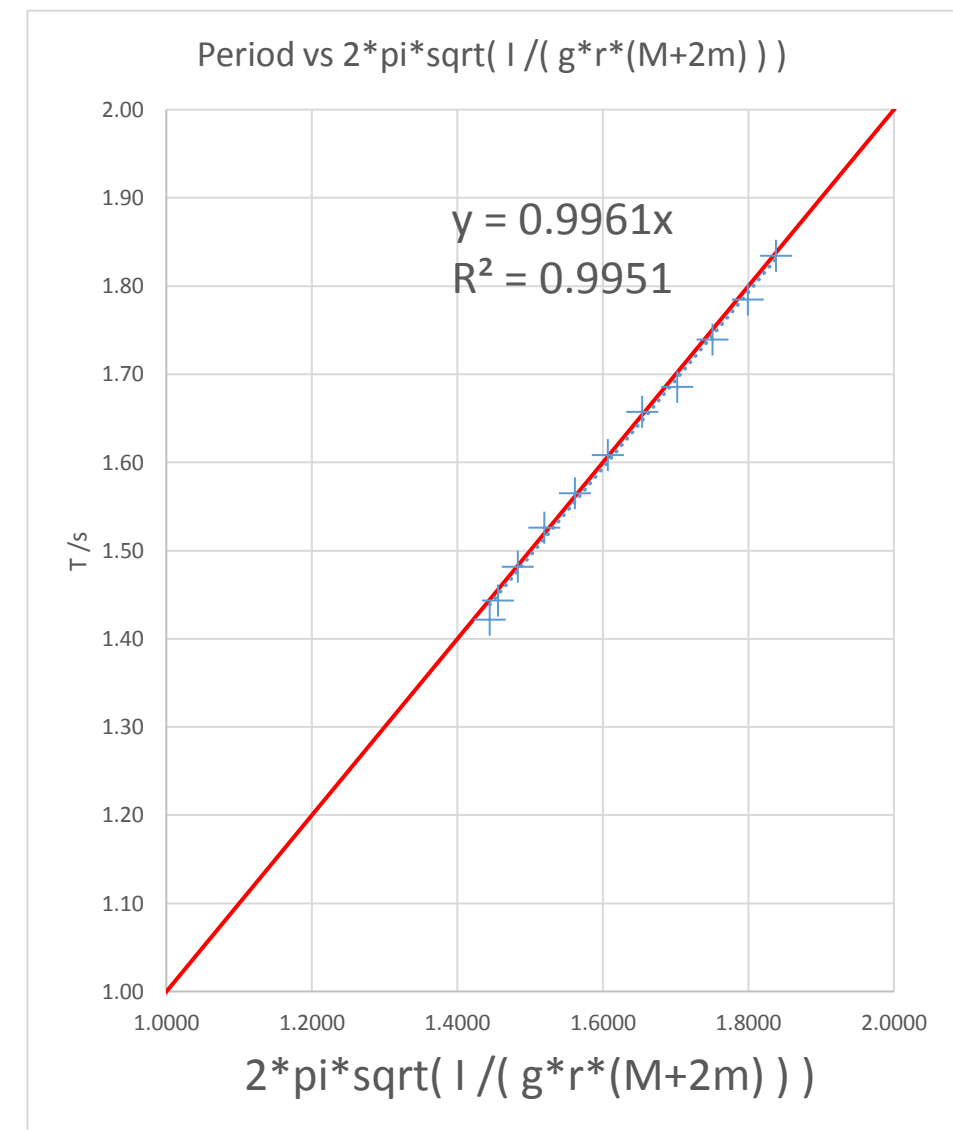


06/06/2019

Ruler mass	M /kg	0.11185
Added mass	m /kg	0.1037
Added mass position	b1 /m	0.85
	b2 /m	0.95
Strength of gravity	g /Nkg⁻¹	9.81
Ruler length	L /m	1
Centre of mass	xbar /m	0.760



Period measurement					Period	Pivot to COM /m	Moment of inertia	Model period /s
Ruler pivot position /cm	a /m	10T /s			T /s	r /m	I /Nm	$2\pi \sqrt{\frac{I}{(M+2m)gr}}$
99	0.01	18.39	18.28	18.36	1.83	0.750	2.010E-01	1.8381
95	0.05	17.72	17.84	17.98	1.78	0.710	1.823E-01	1.7994
90	0.1	17.27	17.57	17.34	1.74	0.660	1.605E-01	1.7509
85	0.15	16.91	16.99	16.67	1.69	0.610	1.402E-01	1.7023
80	0.2	16.59	16.61	16.52	1.66	0.560	1.215E-01	1.6542
75	0.25	16.01	16.11	16.13	1.608333	0.510	1.045E-01	1.6070
70	0.3	15.63	15.73	15.59	1.565	0.460	8.898E-02	1.5617
65	0.35	15.26	15.28	15.24	1.526	0.410	7.509E-02	1.5197
60	0.4	14.78	14.85	14.82	1.481667	0.360	6.281E-02	1.4833
55	0.45	14.3	14.5	14.5	1.443333	0.310	5.212E-02	1.4561
50	0.5	14.11	14.26	14.28	1.421667	0.260	4.302E-02	1.4447

T /s	$2\pi\sqrt{l/(M+2m)g}$
0.00	0
0.20	0.2
0.80	0.8
1.40	1.4
2.00	2
2.60	2.6
3.20	3.2
3.80	3.8

[illegible]