

Fila.Coluna	N.USP	a.1	a.2	a.3	b.1	b.2	b.3	c.1	c.2	c.3	c.4	d.1	d.2	d.3			
1.1	9302160	F estima	V	F	F	V	F(V)	F podem	F(V)	V(F)	F maior	F(V)	V(F)	F			
1.3	9301749	F	V	F o term	F não é	F(V) na	V	F serve	F a anali	F os inte	V	F serven	F na ver	V			
1.4	7580776	F	V	F	F	V	F(V)	V	F	F	F	V	F	F			
1.5	8556398	F	V	F	F	V	F(V(F))	F	F	V	F	F(V)	V	F			
2.1	9301919	F	V	F (V)	F	V	F(V)	F	F(V)	V(F)	F(V)	V	V	F			
2.2	9366450	F	v	F (nenhu	F(não é	V	F(a func	F	V(F)	V	F(maior)	F(seus d	F(V)qua	F (é simétrica sempre)			
2.3	9164031	F	V	F	F	V	F(V)	F	V(F)	V(F)	F(V)	V	F	F			
2.4	8482441	F (variár	V	F (indep	F (a con	V (ide ex	F (V) (lin	F (as inc	F (pois,	V (F)	F(V)	V pois,	g	V	F (V) (Sempre simétrica)		
2.6	7161121	F	V	F	F	V	F(V)	F	V(F)	F	F	F(V)	V	F			
3.1	9379253	F (O MN	V	F	F (É nec	V	(V) F (A	F (Não,	(V) F (É	F	V	F	V	F (ela já é simétrica para v pequeno)			
3.2	3484681	F	V	F	f	v	F	F	F	F	V	F	V	F			
3.4	8942194	F	V	F	F	V	F	F	V	F	F	F	F	V			
3.4	8945332	F	V	F	F	V	F	F	V	F	F	F	F	V			
3.5	8657095	F	V	F	F	V	F	F	F	V	F	F	V	F			
3.6	5694460	F	V	F	F	V	F	F	V	F	F	F	V	F			
4.2	6907972	F	V	F	F	V	F	F	V	V	F	F	V	F			
4.3	8962273	F (mmv	V	F(ñ dep	F	V	F	F	F	F	V	F	V	F			
4.5	9366422		V	F	F	V		F	V	F	F						
5.3	7994180	F (só N)	V	F	F (contra	V	F	F	F	V	F	F	V	F			
5.5	8540251	F	V	F	F	V	F	F	F	V (F)	F	F (V)	V	F (V)			
0.6	gabarito	F (por M	V	F - sem	F (basta	V (mas c	F (isto v	F (usa o	F (flutua	V (as tat	F (fazem	F (exige	V (a f(t)	F (é sempre simétrica)			

Fila/Coluna	N.USP	a.1	a.2	a.3	b.1	b.2	b.3	c.1	c.2	c.3	c.4	d.1	d.2	d.3		
1.3	8676235	F (e a equação cc	V	F	F	V	F(V)	F	F	V(F)	F (fica maior)	F	V	F(v)		
1.6	8944710	F	V	F	F	V	F	F	V(F)	F	V	V	F	F		
2.1	9302434	F	V	F	F	V	V(F)	F	V(F)	F	F	F	V	F		
2.2	9301388	F	V	F	F	V	V	F	F	F	F	F	V	F		
2.3	9797430	F (correção)	V	F	F	V	F(V)	F	F	F	F					
2.4	9849010	F (correção)	V	F	F	V	F	F (serve pra várias)								
2.5	8945325	F - *raiz(N-1)/N	V	F	F - MMV	V	F - funções line	F - independe	F - pode verificar	F - sabendo PDF	F - Superestimad	V	V	F - sempre simétrica		
3.2	9301590	F	V	F - só se a densid	F - MMV	V	F(V)	F	F - mostra a dife	V(F)	F - maior	V	V	F		
3.3	9301944	F - N	V	F	F - MMV	V	F(V) linearidade	F - chi2 serve pa	F - se forem mut	V(F)	F - maior	V	V	F - é simétrica desde v=1		
3.4	9042831	F	V	F	F	V	F (necessária lini	F	F	F	F	V	V	V(F)		
3.5	8539711	F	V	F(V)	F	V	F (necessária line	F	F (pode se comp	F	F (maior)	V	V	F		
3.6	8059553	F - desvio da mé	V	F	F (incerteza)	V	F (linearidade dos	F (sigma i)	F	F	F	V	V	F		
4.1	8049711	F (é a correção d	V	F(V)	F (só precisa que	V	F - (Não sei se g	F (chi2 avalia se	F (indica se as h	V(F)	F (Superestimad	F(V)	V			
4.3	8962057	F (para MMV, de	V	F	F (a dependencia	V	F (ao precisa do	F (dispensao con	F (avalia a adequ	V(F)	F (maior)	F (monomodal e	V	F (sempre simétrica)		
4.5	8927908	F (correção)	V	F	F (nem se N fosse	F (basta dados	V	F(V) linearidade	F (indica i)	F	F (estimativas gn	F (basta saber fd	F (maior)	V (F) exige gauss	V	F (sempre simétrico)
4.6	7994663	F (denominador	V	F	F (N grande impl	F (o método mini	V	F (O método é ni	F (no teste de	V	V	F	V	F		
5.1	7581972	F	V - variância am	F	F	V	V	F	V	F (alto chi^2)	F		V	F		
5.2	8068459	F		F	F (*ajustada)	V	V	F	V	F	F (chi^2 alto)		V	F		
5.3	8068588	F	V	F	F	V	V	F	F	F	F		V	F		
5.4	7994339	F	V	F	F	V	V	F	F	F	F	V	V	F		
5.5	8944752	F - (ao utilizar a	V	F	F - (não há relaç	F	V	F - (é necessário	F - (as incertezas	F - (é possível te	F - (utilizando a f	F - (incerteza sut	V	V	F - (é sempre simétrica) V	
5.6	8944644	F	V	F	F	V	V(F)	F	F	F - para outra pdf	F - Contrario	V	V	F - mias gauss		
0.6	gabarito	F (por MV seria	V	F - sem sentido	F (basta valor e	V (mas diminui o	F (isto vale para	F (usa o sigma i)	F (flutuação será	V (as tabelas são	F (fazem o qui2	F (exigem dados	V (a f) tende à	F (é sempre simétrica)		

Fila	Columna	N_USP	a1) n22 (num. casos com z=2)	a2) Incerteza de n22	a3) n22 teórico	b1) n22	b2) inc. de n22	b3) n22 teórico	c1) n23	c2) inc. n23	c3) n23 teórico	c4) n23	c5) inc. n23	c6) n23 teórico
1.1														
1.2														
1.3		9301749	9544	21	9545	9550	21	9545	9972	5	9973	9973	5	9973
1.4														
1.5		7580776	9539	21	9545	9563	20	9545	9976	5	9973	9971	5	9973
1.6		8556358	9577	20	9545	9545	21	9545	9965	6	9973	9974	5	9973
2.1														
2.2		9366450	9542	21	9545	9544	21	9545	9978	5	9973	9965	6	9973
2.3		8482441	9546	21	9545	9527	21	9545	9969	5	9973	9976	5	9973
2.4		9164031	9521		9545	9554								
2.5		8522595	9561		9545	9541						9979		
2.6														
3.1		9301579	9542	21	9545									
3.2		9379253	9490	21	9545									
3.3		3484661	9525	21	9545	9530	21	9545	9980	5	9973	9971	5	9973
3.4		8657956	9524	21	9545	9530	21	9545	9971	5	9973	9970	5	9973
3.4		8945332	9524	21	9545	9520	21	9545	9971	5	9973	9970	5	9973
3.5		8942194	9592	21	9545	9542	21	9545	9978	5	9973	9968	5	9973
3.6		9594460	9579	21	9545	9551	21	9545	9969	5	9968	9970	5	9973
4.1														
4.2		6907972	9545	21	9545	9963	21	9545	9977	5	9973	9975	5	9973
4.3		6424721	9521	21	9545	9536	21	9545	9976	5	9973	9967	6	9973
4.4		7994339	9536	20	9545	9508	22	9545	9971	5	9973	9969	6	9973
4.5		8945325	9543	21	9545	9587	20	9545	9970	5	9973	9980	5	9973
4.6		8844644	9568	21	9545	9556	20	9545	9967	5	9973	9954	6	9973
5.1		8595589												
5.2		9366422	9563											
5.3		8540251	9571	20	9545	9458	23	9545	9972	5	9973	9969	5	9973
5.4		6880212	9577	21	9545									
5.5		6435701	9550	22	9545				9976	5	9973			
5.6		7581972	9514	21	9545	9562	21	9545						
5.6		8844340	9563	21	9545									
5.6				21	9545		21	9545		5	9973		5	9973
5.6	std(n22)		24.0		std(n22)		27.2		std(n23)		3.9		std(n23)	5.9
5.6	inc. std(n22)		3.5		inc. std(n22)		4.5		inc. std(n23)		0.7		inc. std(n23)	1.0

Fila	Columna	N.USP	a1) n2 (num. casos com t=2)	a2) Incerteza de n2	a3) n2 teórico	b1) n2 (num casos com t=2)	b2) Inc. de n2	b3) n2 teórico	c1) n3	c2) Inc. n3	c3) n3 teórico	c4) n3	c5) Inc. n3	c6) n3 teórico	
1.1															
1.2															
1.3		8676235	9525	21	9545		9548	21	9545	9963	5	9973	9967	5	9973
1.4															
1.5															
1.6		8944710	9555	21	9545		9538	21	9545	9962	6	9973	9971	5	9973
2.1		9302424	9551	21	9545		9555	21	9545	9974	5	9973	9975	5	9973
2.2		9301388	9531	21	9545		9567	20	9545	9972	5	9973	9978	5	9973
2.3		9797430	9559	21	9545		9537	21	9545	9976	5	9973	9970	5	9973
2.4		9301990	9566	21	9545		9575	20	9545	9974	5	9973	9981	4	9973
2.5		9301944	9553	21	9545		9570	21	9545	9977	5	9973	9971	5	9973
2.6		9797340	9530	21	9545		9552	20	9545	9980	5	9973	9980	5	9973
3.1															
3.2															
3.3															
3.4		9062631	9560	21	9545		9535	21	9545	9974	5	9973	9976	5	9973
3.5		8927908	9546	21	9545		9527	21	9545	9969	5	9973	9976	5	9973
3.6		8959553	9536	21	9545		9548	21	9545	9969	5	9973	9968	5	9973
4.1		8667111	9530	21	9545		9549	21	9545	9974	5	9973	9971	5	9973
4.2		8962273	9535	21	9545		9569	20	9545	9968	6	9973	9963	4	9973
4.3		8962057	9544	21	9545		9545	21	9545	9978	5	9973	9969	6	9973
4.4															
4.5															
4.6															
5.1															
5.2															
5.3		8084829	9536	20	9545		9508	22	9545	9971	5	9973	9969	6	9973
5.4															
5.5		7964663	9527	21	9545										
5.6		8944762	9509	22	9545		9505	22	9545	9965	6	9973	9974	5	9973
6.6			21	9545		21	9545		5	9973		5	9973		
std(n2)			15.2		std(n2)		20.5		std(n3)	4.2		std(n3)	4.9		
inc. std(n2)			2.7		inc. std(n2)		3.7		inc. std(n3)	0.9		inc. std(n3)	0.9		

Fila	Coluna	N.USP	a) Inc. estimada visualmente	b) Inc. est. pelo qui2	c.1) a1 corrigido	c.2) a2 corrigido	c.3) a3 corrigido
1.1							
1.2							
1.3		8539496	1.5mV	1.4mV	59.80 (4) mV	-85.23 (4) mV	2.24 (3) mV
1.4							
1.5		7580776	1.5 mV	1.4 mV	59.80 (4) mV	-85.23(4) mV	2.24(3) mV
1.6		9301749	1.7 mV	1.4 mV	59.80(4) mV	-85.23(4) mV	2.24(3) mV
2.1		9301979	1.5 mV	1.4 mV	59.80(4) mV	-85.23(4) mV	2.24(3) mV
2.2							
2.3		3181860	1.7 mV	1.4 mV	59.80 (4) mV	-85.23 (4) mV	
2.4		9164031	2mV	1.4mV			
2.5		8522696	1.7 mV	1.4mV			
2.6		7161121	3 mV	1.4mV	59.80(24) mV	-85.23 (41) mV	2.237 (21) mV
3.1		9376553	1.7 mV	1.4 mV	59.80 (4) mV	-85.23 (4) mV	2.24 (3) mV
3.2		6907072	1.5 mV	1.4mV	59.80 (4) mV	-85.23(4) mV	2.24(3) mV
3.3		3484681	1.5 mV	1.4mV	59.80(2) mV	-85.23(2) mV	2.237 (28) mV
3.4		9421504	1.5 mV	1.4mV	59.80 (4) mV	-85.23 (4) mV	2.24 (3) mV
3.4		8945332	1.0 mV	1.4mV	59.80 (4) mV	-85.23 (4) mV	2.24 (3) mV
3.5		8657095	1.5 mV	1.4mV	59.80(2) mV	-85.23(2) mV	2.237 (28) mV
3.6		6424721	1.7mV	1.4 mV	59.80(4) mV	-85.23(4) mV	2.24(3) mV
4.1		7994812	1.8mV	1.4mV	59.8(4) mV	-85.2 (4) mV	2.2 (3) mV
4.2		7994339	2 mV	1.4 mV	59.80(24) mV	-85.23(4) mV	2.237(3) mV
4.3		8922373	1.0 mV	1.4 mV	0.0598(4) V	-0.0852(4) V	0.0022(3) V
4.4							
4.5		8540251	2mV	1.4mV	59.8(4) mV	-85.2 (4) mV	2.2 (3) mV
4.6		6430701	2mV	1.4mV	59.80(4) mV	-85.23(4) mV	2.24(3) mV
5.1							
5.2		9366422	2mV	1.4mV			
5.3							
5.4							
5.5		7994180	2mV	1.4 mV	59.8 (4) mV	-85.2 (4) mV	2.2 (3) mV
5.6							
5.8		profisoc		1.4 mV	59.80 (38) mV	-85.23(3) mV	2.237 (26) mV
5.8		profisoc			59.80 (4) mV	-85.23 (4) mV	2.24 (3) mV

Flia.Coluna	N.USP	a) Inc. estimada visualmente	b) Inc. est. pelo qui2	c.1) a1 corrigido	c.2) a2 corrigido	c.3) a3 corrigido
1.1						
1.2						
1.3	8676235	2.0mV	1.4mV	59.8024µmV	-85.2304µmV	2.243µmV
1.4						
1.5						
1.6						
2.1	9302434	2.0mV	1.4mV	59.804µmV	-85.234µmV	2.243µmV
2.2	9301388	2.0mV	1.4mV	59.804µmV	-85.234µmV	2.243µmV
2.3	9797430	1.5 mV				
2.4	8423441	3 mV	1.4 mV	59.803 µmV	-85.234µmV	2.243µmV
2.5	8649010	2.0 mV	1.4 mV	59.802 (39) mV	-85.230 (39) mV	2.237 (28) mV
2.6	894719	2.0 mV	1.4 mV	59.802 (39) mV	-85.230 (39) mV	2.237 (28) mV
3.1	9797340	2.5mV	1.3 mV	59.804µmV	-85.234µmV	2.243µmV
3.2	9301944	2.0 mV	1.3 mV	59.804 µmV	-85.234µmV	2.237(25) mV
3.3	9301980	2.5 mV	1.3 mV	59.804 µmV	-85.234µmV	2.237(25) mV
3.4	7994937	2 mV	1.4 mV	59.804µmV	-85.234µmV	2.243µmV
3.5	8945335	1.3 mV	1.4 mV	59.804 µmV	-85.234µmV	2.243µmV
3.6	8947352	1.4 mV	1.4 mV	59.804 µmV	-85.234µmV	2.237(28) mV
4.1	7813372	1mV	1.4mV	59.8024µmV	-85.2304µmV	2.237(29)µmV
4.2	8049711	2.5 mV	1.4 mV	59.8024µmV	-85.230(39)µmV	2.237(28)µmV
4.3	892957	3mV	1.4mV	59.802(28) mV	-85.230(28)µmV	2.242µmV
4.4	8946544	2.2 mV	1.4 mV	59.804µmV	-85.234µmV	2.243µmV
4.5	8959553	1mV	1.4mV	59.802(28)µmV	-85.230(28)µmV	2.237(20)µmV
4.6						
5.1	808489	4 mV	1.4 mV	59.8024µmV	-85.2304µmV	2.237(3)µmV
5.2	8084829	1mV	1.4mV	59.8024µmV	-85.2304µmV	2.237(3)µmV
5.3	7994963	1.5 mV	1.4 mV	59.802(39)µmV	-85.230(39)µmV	2.237(28)µmV
5.4	808688	1.5 mV	1.4 mV	59.8024(40) µmV	-85.230(39) µmV	2.237(28)µmV
5.5	9042831	2.0 mV	1.4 mV	59.8024(40) µmV	-85.230(39) µmV	2.237(28) µmV
5.6	8927938	2.0mV	1.3mV	59.804 µmV	-85.234µmV	2.243µmV
6.0	9304238	1.4 mV	1.4 mV	59.802 (39) mV	-85.230 (39) mV	2.237 (28) mV
6.8	9304238	1.4 mV	1.4 mV	59.80 (4) mV	-85.23 (4) mV	2.24 (3) mV

Fila Columna	N_USP 1	a1	a2	cov(a1,a2)	rho(a1,a2)	qui2
1.1						
1.2						
1.3	9301919	2.990(17)	-4.2615(17)	0.00	-4.75E-05	
1.4	8676235	2.9899(17)	-4.2613(17)	0.00	0	
1.5						
1.6						
2.1	9302434	2.990(17)	-4.2615(17)	-1.37E-10	-4.75E-05	3314
2.2	9301388	2.990(17)	-4.2615(17)	-1.37E-10	-4.46E-05	3314
2.3	9767430	2.990(2)	-4.262(2)	-1.37E-10	-4.75E-05	5716
2.4						
2.5						
2.6	8944710	2.990(17)	-4.2615(17)	-1.37E-10	-4.75E-05	3314
3.1	9301890	2.990(17) V	-4.2615(17) V			
3.2						
3.3	9301944	2.990(17)	-4.2615(17)	-1.37E-10	-4.75E-05	3314
3.4	9042831	2.990(17) V	-4.2615(17) V	-1.37E-10	-4.75E-05	3314
3.5	8927908	2.990(17) V	-4.2613(17) V	-1.37E-10	-4.75E-05	
3.6	8959523	2.990(17) V	-4.2613(17) V	-1.37E-10	-4.75E-05	3314
4.1	8962272	2.990(17)	-4.2615(17)	-1.37E-10	-4.75E-05	3314
4.2	8046711	2.990(17)	-4.2615(17)	-1.37E-10	-4.75E-05	3314
4.3	8962057	2.990(17)	-4.2615(17)	-1.37E-10	-4.75E-05	3314
4.4						
4.4						
4.5						
4.6	8539711	2.990(17)	-4.2615(17)	-1.37E-10	-4.75E-05	
5.1						
5.2						
5.3						
5.4	7994937	2.990(17) V	-4.2615(17) V	-1.37E-10	-4.75E-05	3314
5.5	8945325	2.990(17) V	-4.2615(17) V	-1.37E-10	-4.75E-05	3314
5.6	8944684	2.990(17) V	-4.2613(17) V	-1.37E-10	-4.75E-05	3314
6.6						

Fila	Columna	N_USP 1	alfa_011	Qui cuadrado	sigma_alfa	media alfas	desv-pad alfas	media Qui cuadrado
1.1								
1.2		9009493						
1.3		9301749	2.12	3.64	0.15			
1.4		8676226		3.37				
1.5								
1.6								
2.1		9302434						
2.2		9301388						
2.3		9797430						
2.4		9849010	1.95	1.72	0.13			
2.5								
2.6		8944710	1.92	2.49	0.13			
3.1		9797340	1.91	3.35	0.14			
3.2		9301590	1.90	4.13	0.13			
3.3		9301944	1.95	2.30	0.15			
3.4		9042831	1.91	5.59	0.13			
3.5		8927908						
3.6								
4.1								
4.2		8040711	2.20	1.80	0.13			
4.3								
4.4		8059553	2.23	3.44	0.12			
4.5		7994963	1.96	0.66	0.13			
4.6		8320711	1.95	3.41	0.13			
5.1		8068588	1.92					
5.2								
5.3								
5.4		7994937	2.1	1.35	0.13			
5.5		8945325	1.92	4.92	0.13			
5.6		8946444	2.92	3.34	0.13			
5.8		profesor	1.93	1.34	0.13			
5.8			0.11					

Fila/Coluna	N.USP 1	a) sx	a) sy	a) cov(x,y)	a) rho(x,y)	b) sw	b) sz	c) sx0=sy0	c) cov0(x,y)	c) rho0(x,y)	c) sw0	c) sz0	d) sX	d) sY	d) cov(X,Y)	d) rho(X,Y)	e) sW	e) sZ	f) sx0=sY0	f) cov0(X,Y)	f) rho0(X,Y)	f) sW0	f) sz0	g)	h)
0.8	professor	3.17	3.19	9.10	0.900	6.20	1.42	3.1623	9	0.9	6.1644	1.4142	3.16	3.19	-0.00656	-6.50E-04	4.49	4.49	3.1623	0	0	4.47	4.47		
1.1	9009493	3.12	3.13	9.1	0.9	6.2	1.4	3.16	9	0.9	6.1644	1.4142	3.14	3.18	0.14	0.02	4.5	4.47							
1.3	9301749	3.16	3.18	9.12	0.90	6.21	1.42	3.16	9	0.9	6.16	1.41	3.12	3.13	-0.12	-0.01	4.40	4.45	3.16	0	0	4.47	4.47	Mesmo	Diferentes
2.1	9302434	3.12	3.12	8.74	0.89	6.08	1.43	3.16	9	0.9	6.16	1.41	3.15	3.20	-0.08	-0.008	4.47	4.50	3.16	0	0	4.47	4.47	Mesmo	Diferentes
2.2	9301388	3.20	3.19	9.21	0.90	6.17	1.44	3.16					3.16	3.16	0.18	0.018	4.5	4.42							
2.3	9797430	3.18	3.17	9.1	0.9	6.2	1.4																		
3.1	9797340	3.17	3.16	8.97	0.89	6.16	1.44	3.16	9	0.9	6.1644	1.41	3.13	3.17	-0.05	-0.005	4.44	4.47	10	0	0	4.47	4.47	Mesmo	Diferentes
3.2	9301590	3.11	3.11	8.64	0.90	6.05	1.42	3.16	9	0.9	6.16	1.41	3.18	3.19	0.13	0.013	4.54	4.48	3.16	0	0	4.47	4.47		
3.4	9042831	3.18	3.20	9.11	0.90	6.21	1.45	3.16	9	0.90	6.16	1.41	3.19	3.14	0.17	0.02	4.52	4.44	3.16	0	0	4.47	4.47	Mesmo	Diferentes
3.6	9803416	3.10	3.13	8.71	0.9	6.07	1.41	3.16	9	0.9	6.16	1.41	3.16	3.17	0.14	0.01	4.51	4.45	3.16	0	0	4.47	4.47	Multimetro igual	Multimetro dif.
4.2	8059553	3.18	3.19	9.15	0.9	6.21	1.42	3.16	9	0.9	6.16	1.41	3.21	3.18	0.04	0.004	4.53	4.51	3.16	0	0	4.47	4.47	Mesmo	Dif.
4.3	8927908	3.18	3.19	9.06	0.90	6.24	1.40						3.14	3.17	0.02	0.002	4.46	4.45							
5.4	7994937	3.18	3.19	8.83	0.9	6.31	1.43	3.16	9	0.9	6.16	1.41	3.2	3.09	-0.1	-0.1	4.46	4.51	3.16	0	0	4.47	4.47	Mesmo	diferentes
5.5	8944752	3.10	3.13	8.71	0.90	6.11	1.42	3.16	9	0.9	6.16	1.41	3.17	3.21	-0.04	-0.004	4.50	4.52	3.16	0	0	4.47	4.47	Mesmo	Diferentes
	MEDIA	3.155	3.163	8.968	0.898	6.172	1.422						3.162	3.168	0.033	-0.003	4.486	4.473							
	Desv-Pad	0.035	0.033	0.198	0.004	0.073	0.016						0.027	0.032	0.108	0.031	0.040	0.031							

Fila.Columna	N.USP 1	a) w_m +/- sw_m	a) sw	b) x ou y ?	c) Nx ?	sw (Nx=1)	sw (Nx=2)	sw (Nx=3)	sw (Nx=4)	sw (Nx=5)	sw (Nx=6)	sw (Nx=7)	sw (Nx=8)	sw (Nx=9)	sw (Nx=10)	
1.1	8556398	296.1 +/- 1.6	50	x		7	47.7	34.3	27	25.4	22.2	21.3	21.1	20.8	23.5	29.7
1.2	8539496	302.1 +/- 1.6	49.1	x		7	47.3	32.8	27.4	23.4	22.4	21.8	20.9	21.3	23.4	28.7
1.3																
1.4	7580776	298.4 +/- 1.6	50.1	x			45.3	34.1	27.9	24.3	23.3	21.6	20.8	21.6	22.7	28.9
1.5	9796742	298.2 +/- 1.7	51.4	x		7	45.0	32.5	28.8	24.5	23.3	21.2	20.9	21.8	23.8	27.9
1.6	6880212	299.2 +/- 1.6	51.4	x		8	47.4	32.7	27.0	25.6	22.0	21.4	21.6	21.2	24.0	27.9
2.1	5484455	300.8 +/- 1.7	51.48	x		6	44.2	33.4	27.5	24.0	22.3	21.1	21.2	22.1	22.9	27.7
2.2				x												
2.3	9366450	302.6 +/- 1.6	51.1	x		7	47.1	31.7	27.5	24.6	22.7	22.1	20.7	21.8	23.2	28.8
2.4	8482441	300.6 +/- 1.6	51.5	x		7	45.4	33.6	27.2	24.7	22.5	21.3	20.7	21.7	23.8	28.2
2.5																
2.6	7161121	300.6 +/- 1.6	50.5	x		6	45.0	32.7	27.7	24.7	22.3	20.5	21.0	21.6	23.3	28.0
3.1																
3.2	3484681	299.4 +/- 1.6	52.0	x		7	45.3	33.4	27.4	25.3	22.9	22.1	20.8	22.1	24.2	29.3
3.3	9164031	297.9 +/- 1.7	53.1	x		6	44.9	33.7	26.7	24.1	21.9	21.4	22.0	22.0	23.2	28.7
3.4	8945332	296.7 +/- 1.6	51.0	x		7	44.6	32.4	27.3	24.7	22.5	21.7	20.1	20.6	23.8	29.0
3.4	8942194	299.6 +/- 1.7	52.4	x		7	44.2	32.7	27.9	24.8	22.5	21.2	21.1	22.5	23.0	28.7
3.5	8657095	300.48 +/- 1.60	50.49	x		7	45.7	34.7	27.2	24.9	22.3	20.4	20.3	21.1	23.0	28.8
3.6	5694460	300.4 +/- 1.7	53.8	x		7	45.6	34.6	27.4	24.9	22.1	20.5	20.3	21.2	22.9	28.7
4.1	5197566	301.76 +/- 1.6	51.68	x		6	45.8	31.9	26.5	24.9	22	22	21.4	20.7	23.6	28
4.2	8540251	299.1 +/- 1.7	53.1	x		7	45.5	32.7	27.2	24.2	22.2	20.6	20.4	21.6	22.4	28.5
4.2.1	7994812	300.86 +/- 1.6	51.4	x		6	45.3	32.8	27.8	24.8	23.1	21.4	21.71	21.8	23.1	28.3
4.3	3181850	297.8 +/- 1.7	51.5	x		6	45.7	34.6	27.7	24.7	22.9	20.4	21	21.6	23.2	28
4.4																
4.5																
4.6																
5.1	7994180	299.6 +/- 1.7	52.9	x		7	45.24	33.13	27.94	23.48	23.02	21.87	20.45	21.94	22.53	29.15
5.2	9366422	301.8 +/- 1.6	50.8	x		6	44.3	32.5	27	23.1	22.2	21.4	21.5	21.6	24	28.8
5.3	6907972	300.6 +/- 1.6	52.8	x		7	46.5	32.1	27.7	24.1	23.2	22	21.2	21.2	22.3	29.8
5.4	6435701	299.2 +/- 1.7	53.9	x		7	45.4	32.2	28.3	24.6	22.1	21.5	21.1	21.4	22.8	28.8
5.5	8944644	298.2 +/- 1.7	53,0	x			44.2	31.7	26.8	24.4	23.6	21.3	20.1	21.8	23.9	29.0
5.6	8944752	300.2 +/- 1.6	50.8	x		8	45.2	34.0	28.2	24.6	23.1	22.6	22.0	21.7	23.5	28.7

Fila.Coluna	N.USP 1	a) w_m +- sw_m	a) sw	b) x ou y ?	c) Nx
1.1	9009493	299.8 +- 1.6	51.6	x	7
1.2					
1.3	8676235	299.2+-1.6	51.8	x	7
1.4					
1.5	9301919	299.02 +- 1.6	51.3	x	
1.6					
2.1	9302434	299.1 +-1.6	51.6	x	7
2.2	9301388	301.7+-1.6	50.2	x	6
2.3	9797430	301±2	51.4	x	
2.4	9849010				
2.5					
2.6	8944710	298.1 +- 1.7	54.0	x	7
3.1	9301590	299.5 +- 1.6	50.6	x	7
3.2	9301944	302.2 +- 1.7	53.8	x	7
3.3	9797340	301.5 +- 1.7	51.1	x	7
3.4	9042831	299.7 +- 1.5	48.6	x	7
3.5					
3.6	8927908	300.2 +- 1.6	51.6	x	8
4.1					
4.2	8962273	299.4 +- 1.7	1.6	x	6
4.3	8962057	302.0+-1.6	1.6	x	6
4.4	8539711	298.9 +-1.6	50.1	x	7
4.5	8059553	300.8+-1.6	51.7	x	7
4.6					
5.1					
5.2	8084829	300.1 +- 1.6	49.9	x	7
5.3	7581972	301.5 +- 1.6	51.3	x	7
5.4	8945325	299.5 +- 1.6	50.8	x	8
5.5					
5.6					

Fila.Columna	N.USP 1	a	b	c	d	e	f	g	h
1.1	9009493	F	V	F	F	F	F	V	F
1.3	8676235	F(V)	V	F	F(V(F))	V(F)	F	V	F
1.5	7994953	F	V	F	F	F	V	V	F
1.6	8944710	V	V	F(V)	F	F	F	V	F(V)
2.1	9302434	V	V	F	F	V(F)	V(F)	V	F
2.2	9301388	V	V	F(V)	F	V(F)	V(F)		
2.3	9797430	V	V(F)		V	F	V(F)		F
2.4	9849510	F	V	F(V)	F	F	V	V	F
2.5	8539711	F	V	F	V(F)	V	V	V(F)	F
2.6	8059553	F	V	F	F	F(V)	F(V)	V	F
3.1	9301944	F	V	F	F	V(F)	F	V	V(F)
3.2	9301590	F	V	F(V)	F(V)	F	F		
3.4	9042831	F	V	F	F	F	F(V)	V	F
3.8	9797315	F	V	F	F	F	F	V	
3.8	8927908	F	V	F	F	F	F	V	F
4.1	8946711	V	V	F	F	F	F	V	F
4.2	8962273	V	V	F	F	F	F	V	F
4.3	8962057	V	V	F	F	F	F	V	F
4.6	9883416	F(V)	V	F	F	F	F	V	F
5.4	7994937	F	V	F	F	F	V	V	F
5.5	8944644	F	V	F	F	F(V)	V	V	F
5.6	8944752	F	V	F	F	F	F	V	F
0	professor	F	V	F	F	V	V	V	F

Fila/Columna	N.USP	G	A	sigma_0	P
1.1	8944710	2	346L	L1949(5)	63%
1.2					
1.3	8676235	4	346L	RAU(521L)	60.3%
1.4					
1.5	9848010	3	346L	L1949(5)	0.613
1.6					
2.1	9302434	2	346L	L1949(5)	63%
2.2	9301388	3	346L	L1949(5)	61%
2.3					
2.4	9797430	2	346L	L1949(5)	63%
2.5					
2.6	9863416	4	346L	RAU(521L)	60.8%
3.1	8927908	2	346L	L1949(5)	63%
3.2	9797315	3	346L	L1949(5)	61.2%
3.3	9042831	4	346L	RAU(521L)	60.3%
3.4					
3.5	7994663	3	346L	L1949(5)	
3.6	9301919	4	346L	RAU(521L)	60.30%
4.1	8049711	2	346L	L1949(5)	62.6%
4.2	8962273	3	346L	L1949(5)	61.2%
4.3	8962057	4	346L	RAU(521L)	0.603
4.4					
4.5					
4.6	8059553	4	346L	RAU(521L)	60%
5.1	9797340	2	346L	L1949(5)	63%
5.2	9301590	3	346L	L1949(5)	61.2%
5.3	9301944	4	346L	RAU(521L)	60.3%
5.4	7994937	2	346L	L1949(5)	0.63
5.5	8946464	3	346L	L1949(5)	0.612
5.6	8039711	4	346L	RAU(521L)	0.603
					61.25000%

Fila/Columna	N.USP	Item A	Item B	Item C	Item D	Item E	Item F
1.1	9309488	F	V	F	F(V)	F	F
1.2	8911988	F	V	F(V)	V	F	F
1.3	9009493	F	V	F/(V)	F	N/A	F
1.4	8539496	F(V)	V	V	V	F	F
1.5	9366450	F	V	V	F(V)	F	F
1.6	8565098	F	V	V	F(V)	F	F
2.1	5484455	F	V	V	V	F	F
2.2	3463187	F	V	F(V)	F	F	F
2.3	9164031	F	V	F	F(V)	F	F
2.4	6914893	F	V	V	V	F	F
2.5	3484681	F	V	V	V	F	F
2.6	9301749	F	V	V	V	F	F
3.1	5197588	F	V	V	V	F	F
3.2	8962373	F	V	V	F	F(V)	F
3.3	8482441	F	V	V	F(V)	F(V)	F
3.4	8945332	F	V	V	V	V	F
3.4	8942194	F	V	V	V	V	F
3.5	6907972	F	V	V	V	F	F
3.6	5694400	F	V	V	V	F	F
4.1	6435701	F	V	F	F	V	F
	7994812	F	V	F	F	V(F)	F
	7981972	F	V	F	V	V(F)	F
4.2	8068459	F	V	F	V	V(F)	F
	8944345	F	V	F(V)	F	V	F
4.3	8540251	F	V	F(V)	F	V	F
	7980776	F	V	V	F	V	F
4.4	6880212	F	V	V	F(V)	V	F
	9302160	F	V	V	F	F	F
4.5	9796742	F(V)	V	V	F	F	F
	3181890	V	V	V	F	V	F
4.6							
5.1	8068688	F	V	V	F	F	F
5.2	8522995	V	V	V	V	F	F
	7161121	F	V	F	F	F	F
5.3	6434721	F	V	V	F	F	F
	7994180						
5.4	9366422	F	V	V	V		F
5.5	9301774	F	V	V	V	F	F
5.6	9379253	F	V	V	V	F	F
	9301679	F	V	V	F	F	F
x	8945325	F	V	F	F	N/A	F
	7159942						

Fila/Columna	N.USP	Item A	Item B	Item C	Item D	Item E	Item F
1.1	4796486	F	F	V	V	F	F
1.2							
1.3	8676235	F	V	V	F	F	F
1.4	9797402	F	V	V	F	F	F
1.5	9849010	F	V	V	F	F	F(V)
1.6							
2.1	9302434	F	V	F(V)	F	F	F
2.2	9301388	F	V	V	F	F	F
2.3	9797430	F	V	V	F	F	F
2.4	9301944	F	V	V	F	F	F
2.5	9301990	F(V)	V(F)	V	F	F(V)	F
2.6	9797340	F	V	V	F	F	F
3.1	8944752	F	V	V	F	F	F
3.2	8099553	F(V)	V	V	F	F	F
3.3	9327908	F(V)	V	F(VF)	F	F	F
3.4	9042831	F	V	V	F	F	F
3.5							
3.6							
4.1							
4.2	8046711	F	V	V	F	F	F
4.3	8962057	F	V	V	F	F	F
4.4							
4.5							
4.6							
4.5	9883416	F	V	V	F	F	F
5.1	7994663	F	V	V	F	F(V)	F
5.2							
5.3							
5.4	7094339	F	V	V	F	F	F
5.5	8084829	F	V	V	F	F	F
5.6	8944644	F	V	V	F	F	F

Fila	Colina	N. USP 1	N. USP 2	ST (s) m=100g	ST (s) m=50g	ST (s) m=250g	ST (s) verde	ST (s) dorada	ST (s) varmaha
1.1		9308400		3.10					
1.2		8530496		3.14	2.17	4.97	2.64	3.92	5.54
1.3		9396450		3.11	2.18	4.93	2.61	3.95	5.47
1.4		7109751		3.11					
1.5		8550398		3.15					
1.6		9302760		3.13					
2.1		5484455		3.12	2.21	4.97	2.61	3.98	5.54
2.2		9796742		3.09	2.20	4.95	2.63	3.99	5.52
2.3		7580776		3.13	2.24	4.94	2.63	3.98	5.56
2.4		6880212		3.13					
2.5		6435701		3.14					
2.6		8962273		3.11	2.21	4.94	2.62	3.96	5.51
2.7		6914980	2.81	2.21	4.93	2.64	3.94	5.5	
2.8		6434721		3.14					
3.1		9301579		3.15					
3.2		9379253		3.16					
3.3		8540251		3.11					
3.4		9301749	8944345_2.97	3.15	2.21	4.97	2.61	3.97	5.49
3.5		3484681		3.15	2.01	4.98	2.62	3.99	5.51
3.6		5094680		3.12					
4.1		8520541		3.12					
4.2		8946325		3.15	2.22	4.96	2.65	3.98	5.54
4.3		7994937		3.11	2.21	4.97	2.63	3.98	5.48
4.4		8944782		3.13	2.21	4.97	2.62	3.95	5.51
4.5		8946332		3.12	2.2	4.95	2.64	3.97	5.52
4.6		8942194		3.15					
4.7		8657095		3.16					
5.1		5197586		3.15					
5.2		7994812		3.20					
5.3		7161121	8522595	3.13					
5.4		9396452		3.15	2.19	4.93	2.63	3.96	5.53
5.5		9301774		3.13	2.15	4.95	2.63	3.89	5.54
5.6		7161434		3.15					

M (s)	Massa (g)	100	50	250	verde	dorada	varmaha
σ _m (s)	σ _m (s)	3.132	2.189	4.954	2.627	3.959	5.517
μ _m (s)	μ _m (s)	0.004	0.014	0.004	0.003	0.007	0.007
N	N	10	10	10	10	10	10
σ _{Dr} (s)	σ _{Dr} (s)	0.024	0.054	0.017	0.012	0.027	0.025

- 6435701
- 7994937
- 8522595
- 8942194
- 8944345
- 9379253

File Coluna	NUSP 1	N. USP 2	5*T (s) m=100g	5*T (s) m=50g	5*T (s) m=250g	5*T (s) verde	5*T (s) Bourada	5*T (s) vermelha	5*T (s) 100g AmpGrande	5*T (s) 100g AmpPeq
1.1	4796486		3.15	2.2	5.01	2.62	3.97	5.52	3.13	3.13
1.2										
1.3	8676235		3.2	2.15	4.81	2.55	3.87	5.5	3.16	
1.4	9797402		3.13	2.2	4.96	2.63	3.99	5.55	3.13	3.15
1.5	9848010		3.01	2.18	4.86	2.62	4	5.5	3.07	
1.6										
2.1	9302434		3.14	2.23	4.94	2.62	3.98	5.55	3.11	3.14
2.2	9301388		3.12	2.22	4.96	2.61	3.96	5.49	3.12	3.13
2.3	9301388		3.13	2.24	4.97	2.6	3.96	5.53	3.14	3.14
2.4	9797430		3.09	2.19	4.92	2.60	3.96	5.54	3.12	3.14
2.5	9797315		3.15	2.25	4.95	2.63	4	5.58	3.14	3.14
2.6	9797340		3.07	2.33	5.1	2.6	4.01	5.54	3.09	3.15
3.1	8945030		3.14	2.49	4.92	2.63	4.11	5.52	3.19	3.17
3.2	9301919		3.12	2.21	4.92	2.6	3.94	5.53	3.14	3.15
3.3	7994339		3.16	2.23	4.96	2.62	3.99	5.53	3.14	3.12
3.4	9042831		3.16	2.23	4.96	2.62	3.99	5.53	3.14	3.12
3.5	9863416		3.16	2.26	5.02	2.63	3.98	5.52	3.16	3.14
3.6										
4.1	8084829		3.13	2.22	4.95	2.6	3.97	5.5	3.13	3.14
4.2	8084829		3.13	2.2	4.96	2.62	3.95	5.52	3.11	3.13
4.3	854518		3.13	2.25	4.97	2.58	3.95	5.51	3.12	3.13
4.4	8059553		3.14	2.21	4.97	2.61	3.99	5.5	3.13	3.15
4.5	9048711		3.17	2.22	4.97	2.60	3.96	5.54	3.19	3.15
4.6										
5.1	9301944		3.16	2.22	4.96	2.6	3.92	5.54	3.11	3.09
5.2	9301950		3.15	2.23	5.02	2.61	4.02	5.61	3.16	3.15
5.3	8539711		3.16	2.21	4.98	2.62	3.97	5.56	3.16	3.13
5.4										
5.5	8944644		3.15	2.2	4.94	2.63	3.97	5.54	3.16	3.14
5.6	7581972		3.13	2.23	4.95	2.61	3.97	5.53	3.13	3.12
5.6			3.14	2.21	4.94					

M (g)	m (g)	100	50	250	verde	Bourada	vermelha	100 Amp Grande	100 Amp Peq
50	100	3.134	2.223	4.959	2.599	3.974	5.531	3.132	3.138
50	100	0.006	0.007	0.006	0.007	0.007	0.007	0.007	0.007
N	N	25	24	25	23	24	24	24	22
σ_{CR} (s)	σ_{CR} (s)	0.027	0.036	0.032	0.039	0.041	0.027	0.028	0.039

ST (s) m=50g	ST (s) m=100g	ST (s) m=250g
2.5	3	4
2	3	4
1.5	3	4
1	3	4
0.5	3	4
0	3	4

ST (s) verde	ST (s) 100g AmpPeq	ST (s) 100g AmpGrande	ST (s) vermelha
3	3	3	3
2	3	3	3
1	3	3	3
0	3	3	3

	só a mola x0 (cm)	Posição de equilíbrio (cm) com diferentes massas						Observações e correções:
		50 g	100 g	250 g	verde	amarela	vermelha	
8676235	10	16	20	34	17	25.5	40	Algarismos Significativos
9302160	10.0	14.7	19.6	34.2	16.8	25.4	40.0	
5197566	10	14.7	19.8	34.1	16.6	25.3	39.9	O x0 é 10.0 cm ?
5484455	10.1	15.0	19.9	34.5	17.0	25.7	40.3	Excelente
3484681	10	15	21.5	34.5	17	25.7	40.8	Algarismos Significativos
8945332	10	15	20	34	17	25.5	40	Algarismos Significativos
7580776	20	24.9	29.7	44.2	26.7	35.5	50.2	O x0 é 20.0 cm?
9796742	10	15	19.7	34.5	16.8	25.5	40.2	Erro de digitação (já corrigido para massa 100 g) e Algarismos Significativos
9797315	10.0	14.6	19.5	34.1	16.7	25.3	39.8	
8962273	10	14.9	19.8	34.3	16.8	25.5	40	Algarismos Significativos
9301749	30.2	35.2	39.9	54.7	37.1	45.8	60.3	Excelente
9366450	10.0	14.8	19.5	34.0	17.6	25.1	39.9	
9301590	31.0	35.7	40.5	55.0	37.7	46.2	56.9	Posição de equilíbrio errada para massa vermelha
9301388	0.0	4.8	9.8	24.4	6.8	15.4	30.0	
7994339	10.0	15.0	19.8	34.2	16.8	25.5	40.0	
8540518	20	24.8	29.6	44.2	26.6	35.3	50	Algarismos Significativos
9379253	10.0	14.7	19.8	34.1	16.7	25.4	39.9	
8556398	10.0	14.9	19.8	34.2	16.9	25.4	40.1	
9797340	20.0	24.8	29.9	44.3	26.6	35.6	50.1	
8539496	10.0	14.9	19.9	34.5	17.0	25.7	40.2	
8945325	10.0	14.9	19.8	34.3	16.7	25.5	40.0	
9797430	0	5.0	10.0	24.5	7.0	15.9	30.3	O x0 é 0 cm ou é 0.0 cm?
8944752	21.0	25.9	30.5	45.0	27.6	36.3	50.8	
9042831	20.0	24.8	29.6	44.2	26.6	35.4	49.8	
9302434	0.0	4.8	9.5	24.2	6.8	15.2	30.0	
9301944	0.0	4.9	9.5	24.9	6.7	16.1	30.9	
7994937	0.0	4.8	9.6	24.2	6.9	15.5	30.1	
9863416	29.8	34.5	39.5	54.0	36.5	45.0	59.6	Excelente
9849010	30.3	35.9	40.8	55.0	37.8	46.2	61.0	Excelente
7581972	29.0	34.0	38.7	54.2	35.2	45.2	59.2	
8944644	30.1	34.9	39.9	53.9	35.5	45.2	60	Excelente, no caso do x0, mas o x(vermelha) é 60 cm ou 60.0 cm ?
8944710	10.1	14.9	19.7	34.4	16.9	25.6	40.2	Excelente
8945030	29.3	34.1	38.9	53.3	36.0	44.8	59.3	Excelente
7161121	10.0	14.9	19.4	34.0	16.6	25.3	39.8	