

Frequenz[MHz]	Strom[A]	Fehler f	Fehler I	Vorfaktor	g-Faktor	(Fehler g)^2
21.7	0.99	0.05	0.02	9.61E-08	2.1069	0.001798663
23.4	1.08	0.05	0.02	9.61E-08	2.0826	0.001757987
25.5	1.17	0.05	0.02	9.61E-08	2.0949	0.001778579
26.9	1.24	0.1	0.02	9.61E-08	2.0852	0.001831587
28.2	1.3	0.2	0.02	9.61E-08	2.0851	0.00210856
29.9	1.39	0.3	0.02	9.61E-08	2.0676	0.002541531
31.4	1.45	0.2	0.02	9.61E-08	2.0815	0.002102611
32.8	1.52	0.2	0.02	9.61E-08	2.0742	0.002090432
34.3	1.59	0.3	0.02	9.61E-08	2.0735	0.002551329
36.3	1.68	0.2	0.02	9.61E-08	2.0769	0.002094932
37.9	1.76	0.2	0.02	9.61E-08	2.0699	0.002083285
39.5	1.85	0.2	0.02	9.61E-08	2.0523	0.002054323
41.1	1.91	0.2	0.02	9.61E-08	2.0683	0.002080777
42.6	1.96	0.3	0.02	9.61E-08	2.0891	0.002577315
44	2.03	0.2	0.02	9.61E-08	2.0834	0.002105766
					2.0794	0.011842987

Linearer Fit:

Linear Regression of dataset: Table1_1, using function: $A \cdot x + B$

Weighting Method: Instrumental, using error bars dataset: Table1_4

From $x = 9.900000000000000e-01$ to $x = 2.030000000000000e+00$

B (y-intercept) = $4.024797945854677e-01 \pm 6.275888154769474e-03$

A (slope) = $2.135527064054180e+01 \pm 4.019417276897904e-03$

Chi^2/doF = $1.375568449197170e+03$

$R^2 = 0.999366908396681$

Adjusted $R^2 = 0.999261393129461$

RMSE (Root Mean Squared Error) = 37.0886566108449

RSS (Residual Sum of Squares) = $17'882.3898395632$

$B = c_2 \cdot I$

c_2 [T/A]

0.00074332

0.00074332

0.00074332

0.00074332

g-faktor aus fit:

$g =$

2.0526

g-fehler:

0.0003864

2.Experiment

I_Helm	Fehler I	Winkel u	Fehler u	Frequenz f	Fehler f	B_H [T]	
1	2.18	0.005	3.1415927	0.12217305	29.9	0.1	0.00162
1	1.13	0.005	4.712389	0.12217305	29.9	0.1	0.00084
1	0.62	0.005	0	0.12217305	29.9	0.1	0.00046
1	1.28	0.005	1.5707963	0.12217305	29.9	0.1	0.00095
B_ges [T] =	0.001067	Fehler B_ge	3.5682E-06		B_ges[T]		0.00103
berechnet	0.001067		3.5682E-06		gemessen		0.00103
	0.001067		3.5682E-06				0.00103
	0.001067		3.5682E-06				0.00103

ohne Magnet

Spulenstrom I	B_0	Fehler
1.38	0.001026	1E-05
1.38	0.001026	1E-05
1.38	0.001026	1E-05
1.38	0.001026	1E-05

B_M[T]	Fehler			
	aus B_H	aus u	aus B_ges	Gesamt
0.00059	2.32E-10	4E-39	2.39077E-10	3.3E-10
0.00059	1.96E-14	1E-08	1.43117E-10	1.1E-08
0.00056	2.24E-10	0	2.39077E-10	3.3E-10
0.00038	2.25E-14	1E-08	1.28513E-10	1.4E-08

B_M[T] =	0.000533	Fehler	0.000000004
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