pi	nu 0	e	h bar	m sub e	a0	c	mp	sqrt(.75)	alpha	epsilon 0	m u				
3.1415927E+00	1.2566371E-06	1.6021892E-19	1.0545888E-34	9.1095345E-31	5.2917706E-11	2.9979246E+08	1.6726486E-27	8.6602540E-01	7.2973526E-03	8.854187817E-12	1.88353140E-28				
	epsilon 0	uB	eV/cm^-1	u sub e	aH	aup	md	mag morm p			mag morm u exp				
	8.85E-12	9.2740095E-24	0.000123985	9.1045760E-31	5.29465E-11	2.56071E-13	3.3435860E-27	1.4106067100E-26			4.49044799E-26				
														p. 17 CODATA 2006	
	r	r(aH)		Eele (J)	Emag (J)	E shift (J) P1/2 to S1/2	E shift (eV) P1/2 to S1/2	f (MHz) P1/2 to S1/2	E (J) P1/2 to S1/2 with recoil correction	f (MHz) P1/2 to S1/2 with recoil correction				Exp (MHz)	% dif (exp-theory)/exp
electron	1.05893E-10	1.99999744		6.95953E-25	-4.38449E-27	6.91569E-25	4.31640E-06	1043.69	7.00445E-25	1057.09				1057.845	0.07
	1.05893E-10	2.00000000													
					Emag (J)		H Energy (Lamb)	H Recoil (J)	H Recoil (MHz)					MHz difference	
					-4.38443E-27		1.63404E-18	8.87591E-27	13.40					0.76	
	r	r(aH)	r(aup)	Eele (J)	Emag (J)	shift (J) P1/2 to S1/2	shift (eV) P1/2 to S1/2	f (GHz) P1/2 to S1/2	E (J) P1/2 to S1/2 with recoil correction	f (GHz) P1/2 to S1/2 with recoil correction	E (J) P3/2 F=2 to S1/2 F=1	f (GHz) P3/2 F=2 to S1/2 F=1		Exp (GHz)	GHz difference	% dif (exp-theory)/exp
muon	5.1228932E-13	9.6755983E-03	2.0005735E+00	-3.22846E-20	2.03334E-22	-3.20813E-20	-2.00234E-01	48416.0	-3.24225E-20	48931.0	-3.30507E-20	49879.0		49881.88	2.9	0.0058
	5.1214246E-13	9.6728246E-03	2.0000000E+00													
					Emag (J)		up Energy (n=2 to n=1)	up Recoil (J)	up Recoil (GHz)							
					2.03799E-22		3.37862E-16	-3.41241E-22	514.9889							
							2S1/2 F=1 shift from 2S1/2 (eV)	2S1/2 F=1 shift from 2S1/2 (J)	2S1/2 F=1 shift from 2S1/2 (GHz)							
							0.0057037	9.13841E-22	1379							
							2P3/2 F=2 shift from 2P1/2 (eV)	2P3/2 F=2 shift from 2P1/2 (J)	2P3/2 F=2 shift from 2P1/2 (GHz)							
							0.0096243	1.54199E-21	2327							