Constants

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Name	Variable	Value	Unit
Speed of light in a vacuum	c	$299\,792\,458$	m/s
Planks Constant	$\hbar$	$6.626\,070\,15 \cdot 10^{-34}$	Js
Planks Constant	h	$4.135\,667\,87 \cdot 10^{-15}$	eVs
The Elemental Charge	e	$1.602\,176\,634 \cdot 10^{-19}$	C
Bohr Radius	a_0	$5.291\,772\,109\,03 \cdot 10^{-11}$	m
Electron Mass	m_e	$9.109\,383\,7015 \cdot 10^{-31}$	kg
Electron Mass	m_e	$0.510\,998\,954$	MeV/c^2
Proton Mass	m_p	$1.672\,621\,923\,69 \cdot 10^{-27}$	kg
Proton Mass	m_p	$938.272\,096$	MeV/c^2
Proton Mass	m_p	$1836.152\,673\,43$	m_e
Neutron Mass	m_n	$1.674\,927\,498\,04 \cdot 10^{-27}$	kg
Neutron Mass	m_n	$939.565\,428$	MeV/c^2
Neutron Mass	m_n	$1838.683\,661\,73$	m_e
Boltzmanns Constant	k	$1.380\,649 \cdot 10^{-23}$	J/K
Boltzmanns Constant	k	$8.617\,333\,6333 \cdot 10^{-5}$	eV/K
Avogadros Constant	N_A	$6.022\,140\,76 \cdot 10^{23}$	mol^{-1}
Rydbergs Constant	R_y	$\frac{\hbar^2}{2ma_0^2}$	
Rydbergs Constant	R_y	13.6057	eV
Rydbergs Constant	R_y	$109\,737.32$	cm^{-1}
The General Gas Constant	R	$8.314\,462\,618$	J/(mol $\cdot$ K)
The Fine Structure Constant	α	$\frac{e^2}{4\pi\varepsilon_0\hbar c} = \frac{1}{137.036}$	
Dielectric Constant for Vacuum	ε_0	$0.885\,419 \cdot 10^{-11}$	As/Vm
Permeability of Vacuum	μ_0	$1.256\,637\,062\,12 \cdot 10^{-6}$	Vs/Am
Permeability of Vacuum	μ_0	$4\pi \cdot 10^{-7}$	Vs/Am
The Bohr Magnetone	μ_B	$\frac{e\hbar}{2m} = 9.274\,010\,0783 \cdot 10^{-24}$	Am^2