Constants

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Name	Variable	Value	Unit
Speed of light in a vacuum	c	$299\,792\,458$	m/s
Planks Constant	$\hbar$	$6.62607015 \cdot 10^{-34}$	Js
Planks Constant	h	$4.13567 \cdot 10^{-15}$	eVs
The Elemental Charge	e	$1.602176634 \cdot 10^{-19}$	C
Bohr Radius	a_0	$0.529\,177 \cdot 10^{-10}$	m
Electron Mass	m_e	$0.910\,939 \cdot 10^{-30}$	kg
Electron Mass	m_e	$0.510\,999$	$\mathrm{MeV/c^2}$
Proton Mass	m_p	$1.672\,6219 \cdot 10^{-27}$	kg
Proton Mass	m_p	938.2723	$\mathrm{MeV/c^2}$
Proton Mass	m_p	$1836.152\,70$	m_e
Neutron Mass	m_n	$1.674\,929 \cdot 10^{-27}$	kg
Neutron Mass	m_n	939.5656	$\mathrm{MeV/c^2}$
Neutron Mass	m_n	$1838.683\,62$	m_e
Boltzmanns Constant	k	$1.380649 \cdot 10^{-23}$	J/K
Boltzmanns Constant	k	$0.861\,739 \cdot 10^{-4}$	eV/K
Avogadros Constant	N_A	$6.02\,214\,076 \cdot 10^{23}$	$\mathrm{mol^{-1}}$
Rydbergs Constant	R_y	$\frac{\hbar^2}{2ma_0^2}$	
Rydbergs Constant	R_y	13.6057	eV
Rydbergs Constant	R_y	$109\,737.32$	$\mathrm{cm^{-1}}$
The General Gas Constant	R	$0,831\,45 \cdot 10^4$	$\mathrm{J/(kmol \cdot K)}$
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	$1.256\,637 \cdot 10^{-6}$	Vs/Am
Permeability of Vacuum	μ_0	$4\pi \cdot 10^{-7}$	Vs/Am
The Bohr Magnetone	μ_B	$\frac{e\hbar}{2m} = 9.274\,02 \cdot 10^{-24}$	$\mathrm{Am^2}$