

A

Units and constants

WARNING: unfinished

Quantity	Unit	Symbol	Composite
length	meter	m	
mass	kilogram	m	
time	second	s	
temperature	kelvin	K	
amount	mole	mol	
force	newton	N	kg m s^{-2}
pressure	pascal	Pa	$\text{kg m}^{-1} \text{s}^{-2}$
energy	joule	J	$\text{kg m}^2 \text{s}^{-2}$

Table A.1: *Table of units in the International System [1]. In the first column one finds the name of the quantity that is measured by the unit, in the second the common name for the unit, in the third the symbol used to denote the unit, and in the fourth the breakdown of composite symbols into elementary units.*

Quantity	Symbol	Value		Unit
Standard gravity	g_0	9.80665		m s^{-2}
Age of the Universe		4.7 (10)	10^{17}	s
Avogadro's number	N_A	6.0221367 (36)	10^{23}	mol^{-1}
Earth's mass		5.976 (4)	10^{24}	kg
Earth's radius		6.378164 (2)	10^6	m
Gravitational constant	G	6.67259 (85)	10^{-11}	$\text{N m}^2 \text{kg}^{-2}$
Hubble's constant	H	3.2 (10)	10^{-18}	s^{-1}
Molar gas constant	R	8.314510 (70)		$\text{J K}^{-1} \text{mol}^{-1}$
Moon's mass		7.3483 (1)	10^{22}	kg
Moon's radius		1.7382 (1)	10^6	m
Speed of light	c	2.99792458	10^8	m s^{-1}
Sun's mass		1.9891 (1)	10^{30}	kg
Sun's radius		6.9599 (1)	10^8	m

Table A.2: Table of values of a collection of constant taken from various sources. In the first column one finds a description of the constant, in the second a possible commonly used symbol for the constant, in the third the value of the constant with the uncertainty on the last digits in parenthesis (if it is absent, the value is fixed by definition), and in the fourth the SI unit for the constant.