# 9.3 Physical Constants

| Constant | Value |
|---|---|
| Light speed in vacuum | $c = 2{,}997.10^{8}\ m.s^{-1}$ |
| Boltzmann's constant | $k = 1{,}380.10^{-23}\ J.K^{-1}$ |
| Hydrogen mass | $m_H = 1{,}673.10^{-27}\ kg$ |
| Proton mass | $m_p = 1{,}672.10^{-27}\ kg$ |
| Elementary charge | $e = 1{,}602.10^{-19}\ C$ |
| Planck's constant | $h = 6{,}626.10^{-34}\ J.s$ |
| Avogadro's number | $N_A = 6{,}022.10^{23}\ mol^{-1}$ |
| Gass constant | $R = 8{,}314.mol^{-1}\ K^{-1}$ |
| Faraday's constant | $F = 9{,}648.10^{4}\ C.mol^{-1}$ |
| Gravitation constant | $6{,}672.10^{-11}\ N.m^{2}.kg^{-2}$ |