

Properties of Hadrons

This sheet lists properties of some hadrons. You will need to refer to it, and add to it, as you study particle physics, so keep it somewhere safe. You may find it useful to use a highlighter pen, or some other means, to distinguish the mesons (B=0) from the baryons (B=1) in the table. You will not be expected to memorize the properties of individual hadrons.

Some assorted hadrons (in alphabetical order)

3 Y						
Name	Symbol	Rest mass/ (GeV/c²)	Charge <i>Q/</i> (1.6 × 10 ⁻¹⁹ C)	Baryon number <i>B</i>		
delta minus	Δ^{-}	1.232	1	1		
delta plus	Δ^+	1.232	1	1		
delta plus plus	Δ^{++}	1.232	2	1		
delta zero	Δ^0	1.232	0	1		
K minus	K-	0.4937	-1	0	,	
K plus	K ⁺	0.4937	1	0		
K zero	K_0	0.4977	0	0		
K zero bar	\overline{K}^{o}	0.4977	0	0		
lambda	Λ	1.116	0	1		
neutron	n	0.9396	0	1		
omega minus	Ω^-	1.672	-1	1		
phi	ф	1.020	0	0		
pi minus	π^-	0.1396	-1	0		
pi plus	π^+	0.1396	1	0		
pi zero	π^0	0.1350	0	0		
proton	p	0.9383	1	1		
rho zero	$ ho^0$	0.782	0	0		
sigma minus	Σ-	1.197	-1	1		
sigma plus	\sum +	1.189	1	1		
sigma zero	\sum_0	1.192	0	1		
xi minus	process prod komed	1.315	-1	1		
xi zero	Ξ0	1.321	0	1		

In this table, each value of rest mass is quoted to four significant figures.