

Lambda (15 Points)

Up Quark

Electric Charge: $+2/3$
Spin: $1/2$
Mass: 2.2 MeV
Mean Lifetime: Stable

Colour Charge: Yes
Baryon Number: $1/3$
1st generation (1 point)



Strange Quark

Electric Charge: $-1/3$
Spin: $1/2$
Mass: 93.5 MeV
Mean Lifetime: 10 nanoseconds

Colour Charge: Yes
Baryon Number: $1/3$
2nd generation (2 points)



Down Quark

Electric Charge: $-1/3$
Spin: $1/2$
Mass: 4.7 MeV
Mean Lifetime: Stable

Colour Charge: Yes
Baryon Number: $1/3$
1st generation (1 point)



Electric Charge: 0
Spin: $1/2$
Mass: 1115.7 MeV
Mean Lifetime: 2.6×10^{-10} s

Lambda baryons consist of one up quark, one down quark and one higher generation quark with isospin 0.

The Lambda baryon was discovered in 1950 by V. D. Hopper and S. Biswas of the University of Melbourne.

Charmed Lambda (15 Points)

Up Quark

Electric Charge: $+2/3$
Spin: $1/2$
Mass: 2.2 MeV
Mean Lifetime: Stable

Colour Charge: Yes
Baryon Number: $1/3$
1st generation (1 point)



Charm Quark

Electric Charge: $+2/3$
Spin: $1/2$
Mass: 1.27 GeV
Mean Lifetime: 1 picosecond

Colour Charge: Yes
Baryon Number: $1/3$
2nd generation (2 points)



Down Quark

Electric Charge: $-1/3$
Spin: $1/2$
Mass: 4.7 MeV
Mean Lifetime: Stable

Colour Charge: Yes
Baryon Number: $1/3$
1st generation (1 point)



Electric Charge: +1
Spin: $1/2$
Mass: 2286.5 MeV
Mean Lifetime: 2.0×10^{-13} s

Lambda baryons consist of one up quark, one down quark and one higher generation quark with isospin 0.

The Lambda baryon was discovered in 1950 by V. D. Hopper and S. Biswas of the University of Melbourne.

Particle Builder

Target Card

Particle Builder

Target Card