

Lambda (15 Points)

Up Quark

Electric Charge: $+2/3$
Spin: $1/2$
Mass: 2.3 MeV
Half Life: Stable

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



Strange Quark

Electric Charge: $-1/3$
Spin: $1/2$
Mass: 95 MeV
Half Life: 0.1 nanoseconds

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



Down Quark

Electric Charge: $-1/3$
Spin: $1/2$
Mass: 4.8 MeV
Half Life: Stable

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



Electric Charge: 0
Spin: $1/2$
Mass: 1115.7 MeV
Half Life: 2.6×10^{-10} sec

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 Melbourn.

Chamed Lambda (15 Points)

Up Quark

Electric Charge: $+2/3$
Spin: $1/2$
Mass: 2.3 MeV
Half Life: Stable

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



Charm Quark

Electric Charge: $+2/3$
Spin: $1/2$
Mass: 1.29 GeV
Half Life: 1.1 picoseconds

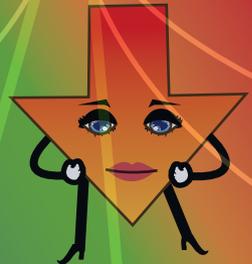
Colour Charge: Yes
Baryon Number: $1/3$
2nd generation (2 points)



Down Quark

Electric Charge: $-1/3$
Spin: $1/2$
Mass: 4.8 MeV
Half Life: Stable

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



Electric Charge: +1
Spin: $1/2$
Mass: 2286.5 MeV
Half Life: 2.0×10^{-13} sec

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

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