$\Lambda(1520)\ D_{03}$

$I(J^P) = 0(\frac{3}{2}^-)$

Mass $m = 1519.5 \pm 1.0$ MeV [i]
Full width $\Gamma = 15.6 \pm 1.0$ MeV [i]

$\Lambda(1520)$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$N\overline{K}$	$45 \pm 1\%$	244
$\Sigma\pi$	$42 \pm 1\%$	267
$\Lambda\pi\pi$	$10 \pm 1\%$	252
$\Sigma\pi\pi$	$0.9 \pm 0.1\%$	152
$\Lambda\gamma$	$0.8 \pm 0.2\%$	351

$\Lambda(1600)\ P_{01}$, $\Lambda(1670)\ S_{01}$, $\Lambda(1690)\ D_{03}$, $\Lambda(1800)\ S_{01}$, $\Lambda(1810)\ P_{01}$, $\Lambda(1820)\ F_{05}$ $\Lambda(1830)\ D_{05}$, $\Lambda(1890)\ P_{03}$, $\Lambda(2100)\ G_{07}$, $\Lambda(2110)\ F_{05}$, $\Lambda(2350)\ H_{09}$

The Λ resonances listed above are omitted from this Booklet but not from the Summary Table in the full *Review*.

Σ BARYONS
$(S = -1, I = 1)$

$\Sigma^+ = uus$, $\Sigma^0 = uds$, $\Sigma^- = dds$

Σ^+

$I(J^P) = 1(\frac{1}{2}^+)$

Mass $m = 1189.37 \pm 0.07$ MeV (S = 2.2)
Mean life $\tau = (0.799 \pm 0.004) \times 10^{-10}$ s
$c\tau = 2.396$ cm
Magnetic moment $\mu = 2.458 \pm 0.010\ \mu_N$ (S = 2.1)
$\Gamma(\Sigma^+ \to n\ell^+\nu)/\Gamma(\Sigma^- \to n\ell^-\overline{\nu}) < 0.043$

Decay parameters

$p\pi^0$	$\alpha_0 = -0.980^{+0.017}_{-0.015}$
"	$\phi_0 = (36 \pm 34)^\circ$
"	$\gamma_0 = 0.16$ [g]
"	$\Delta_0 = (187 \pm 6)^\circ$ [g]
$n\pi^+$	$\alpha_+ = 0.068 \pm 0.013$
"	$\phi_+ = (167 \pm 20)^\circ$ (S = 1.1)
"	$\gamma_+ = -0.97$ [g]
"	$\Delta_+ = (-73^{+133}_{-\ 10})^\circ$ [g]
$p\gamma$	$\alpha_\gamma = -0.76 \pm 0.08$