$N(2190)$ G_{17}

$I(J^P) = \frac{1}{2}(\frac{7}{2}^-)$

Mass $m = 2100$ to 2200 (≈ 2190) MeV
Full width $\Gamma = 350$ to 550 (≈ 450) MeV
$p_{beam} = 2.07$ GeV$/c$ $\quad 4\pi\lambda\!\!\!^{-2} = 6.21$ mb

$N(2190)$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$N\pi$	10–20 %	888

$N(2220)$ H_{19}

$I(J^P) = \frac{1}{2}(\frac{9}{2}^+)$

Mass $m = 2180$ to 2310 (≈ 2220) MeV
Full width $\Gamma = 320$ to 550 (≈ 400) MeV
$p_{beam} = 2.14$ GeV$/c$ $\quad 4\pi\lambda\!\!\!^{-2} = 5.97$ mb

$N(2220)$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$N\pi$	10–20 %	905

$N(2250)$ G_{19}

$I(J^P) = \frac{1}{2}(\frac{9}{2}^-)$

Mass $m = 2170$ to 2310 (≈ 2250) MeV
Full width $\Gamma = 290$ to 470 (≈ 400) MeV
$p_{beam} = 2.21$ GeV$/c$ $\quad 4\pi\lambda\!\!\!^{-2} = 5.74$ mb

$N(2250)$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$N\pi$	5–15 %	923

$N(2600)$ $I_{1,11}$

$I(J^P) = \frac{1}{2}(\frac{11}{2}^-)$

Mass $m = 2550$ to 2750 (≈ 2600) MeV
Full width $\Gamma = 500$ to 800 (≈ 650) MeV
$p_{beam} = 3.12$ GeV$/c$ $\quad 4\pi\lambda\!\!\!^{-2} = 3.86$ mb

$N(2600)$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$N\pi$	5–10 %	1126

Δ BARYONS
($S = 0$, $I = 3/2$)

$\Delta^{++} = uuu$, $\quad \Delta^{+} = uud$, $\quad \Delta^{0} = udd$, $\quad \Delta^{-} = ddd$

$\Delta(1232)$ P_{33}

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

Mass $m = 1230$ to 1234 (≈ 1232) MeV
Full width $\Gamma = 115$ to 125 (≈ 120) MeV
$p_{beam} = 0.30$ GeV$/c$ $\quad 4\pi\lambda\!\!\!^{-2} = 94.8$ mb

$\Delta(1232)$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$N\pi$	>99 %	227
$N\gamma$	0.55–0.61 %	259

$\Delta(1600)$ P_{33}

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

Mass $m = 1550$ to 1700 (≈ 1600) MeV
Full width $\Gamma = 250$ to 450 (≈ 350) MeV
$p_{beam} = 0.87$ GeV$/c$ $\quad 4\pi\lambda\!\!\!^{-2} = 18.6$ mb

$\Delta(1600)$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$N\pi$	10–25 %	512
$N\pi\pi$	75–90 %	473
$\quad\Delta\pi$	40–70 %	301
$\quad N\rho$	<25 %	†
$\quad N(1440)\pi$	10–35 %	74
$p\gamma$	$\sim$ 0 %	–

$\Delta(1620)$ S_{31}

$I(J^P) = \frac{3}{2}(\frac{1}{2}^-)$

Mass $m = 1615$ to 1675 (≈ 1620) MeV
Full width $\Gamma = 120$ to 180 (≈ 150) MeV
$p_{beam} = 0.91$ GeV$/c$ $\quad 4\pi\lambda\!\!\!^{-2} = 17.7$ mb

$\Delta(1620)$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$N\pi$	20–30 %	526
$N\pi\pi$	70–80 %	488
$\quad\Delta\pi$	30–60 %	318
$\quad N\rho$	7–25 %	†
$N\gamma$	0.02–0.06 %	538

$\Delta(1700)$ D_{33}

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

Mass $m = 1670$ to 1770 (≈ 1700) MeV
Full width $\Gamma = 200$ to 400 (≈ 300) MeV
$p_{beam} = 1.05$ GeV$/c$ $\quad 4\pi\lambda\!\!\!^{-2} = 14.5$ mb

$\Delta(1700)$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$N\pi$	10–20 %	580
$N\pi\pi$	80–90 %	547
$\quad\Delta\pi$	30–60 %	385
$\quad N\rho$	30–55 %	†
$N\gamma$	0.16–0.28 %	591

$\Delta(1900)$ S_{31}

$I(J^P) = \frac{3}{2}(\frac{1}{2}^-)$

Mass $m = 1850$ to 1950 (≈ 1900) MeV
Full width $\Gamma = 140$ to 240 (≈ 200) MeV
$p_{beam} = 1.44$ GeV$/c$ $\quad 4\pi\lambda\!\!\!^{-2} = 9.71$ mb

$\Delta(1900)$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$N\pi$	10–30 %	710

$\Delta(1905)$ F_{35}

$I(J^P) = \frac{3}{2}(\frac{5}{2}^+)$

Mass $m = 1870$ to 1920 (≈ 1905) MeV
Full width $\Gamma = 280$ to 440 (≈ 350) MeV
$p_{beam} = 1.45$ GeV$/c$ $\quad 4\pi\lambda\!\!\!^{-2} = 9.62$ mb

$\Delta(1905)$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$N\pi$	5–15 %	713
$N\pi\pi$	85–95 %	687
$\quad\Delta\pi$	<25 %	542
$\quad N\rho$	>60 %	421
$N\gamma$	0.01–0.04 %	721

$\Delta(1910)$ P_{31}

$I(J^P) = \frac{3}{2}(\frac{1}{2}^+)$

Mass $m = 1870$ to 1920 (≈ 1910) MeV
Full width $\Gamma = 190$ to 270 (≈ 250) MeV
$p_{beam} = 1.46$ GeV$/c$ $\quad 4\pi\lambda\!\!\!^{-2} = 9.54$ mb

$\Delta(1910)$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$N\pi$	15–30 %	716

$\Delta(1920)$ P_{33}

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

Mass $m = 1900$ to 1970 (≈ 1920) MeV
Full width $\Gamma = 150$ to 300 (≈ 200) MeV
$p_{beam} = 1.48$ GeV$/c$ $\quad 4\pi\lambda\!\!\!^{-2} = 9.37$ mb

$\Delta(1920)$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$N\pi$	5–20 %	722