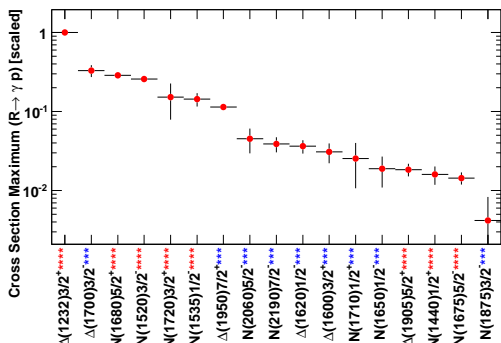


Baryon Resonance Coupling to the Photon

Bonn-Gatchina PWA solution

A. V. Anisovich, *et al.*, Eur. Phys. J. A **48** (2012) 15.

Cross section maximum assuming a Breit-Wigner shape and no interference.



Only coupling uncertainties are propagated.

results from fits to:

πN Production

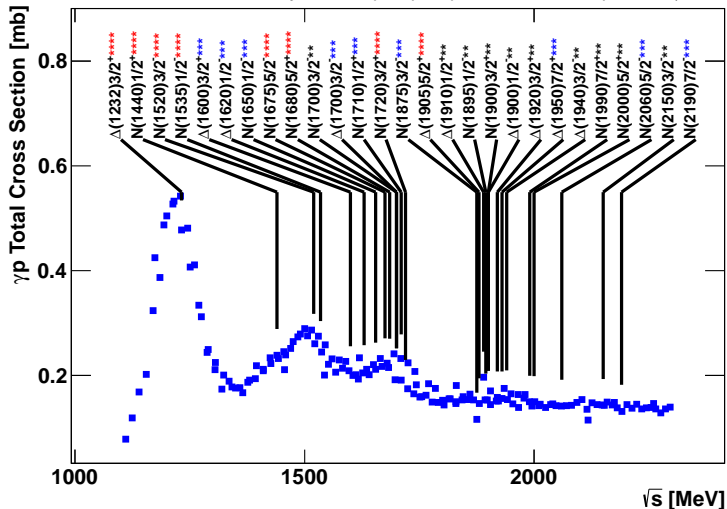
πN , $K^0\Lambda$, $K^+\Sigma^+$, $K^0\Sigma^0$,
 $\pi^0\pi^0n$

γN Production

$p\pi^0$, $p\eta$, $n\pi^+$, $K^+\Lambda$, $K^+\Sigma$,
 $K^0\Sigma^+$, $p\pi^0\pi^0$, $p\pi^0\eta$

Baryon Resonance Coupling to the Photon

A. V. Anisovich *et al.* Eur. Phys. J. A 48 (2012) 15. (Solution BG2011-02) Seen in γN



Baryon Resonance Coupling to the Photon

Resonance	Xsection Max	Uncertainty
$\Delta(1232)3/2^+$ * * * *	1	0.027992
$\Delta(1700)3/2^-$ * * *	0.33037	0.056631
$N(1680)5/2^+$ * * * *	0.28789	0.012736
$N(1520)3/2^-$ * * * *	0.25751	0.015509
$N(1720)3/2^+$ * * * *	0.15269	0.073878
$N(1535)1/2^-$ * * * *	0.14349	0.027331
$\Delta(1950)7/2^+$ * * *	0.11385	0.0077315
$N(2060)5/2^-$ * * *	0.045269	0.015667
$N(2190)7/2^-$ * * *	0.038896	0.0084299
$\Delta(1620)1/2^-$ * * *	0.036499	0.007019
$\Delta(1600)3/2^+$ * * *	0.030863	0.0086759
$N(1710)1/2^+$ * * *	0.025355	0.014628
$N(1650)1/2^-$ * * *	0.01896	0.0080436
$\Delta(1905)5/2^+$ * * * *	0.018436	0.0033514
$N(1440)1/2^+$ * * * *	0.015988	0.0041936
$N(1675)5/2^-$ * * * *	0.014419	0.0024965
$N(1875)3/2^-$ * * *	0.0041752	0.0041493

Baryon Resonance Coupling to the Photon

Resonance	Partial Width [MeV]	Total Width [MeV]
$N(1440)1/2^+$ * * * *	0.29929+-0.078503	365+-35
$N(1520)3/2^-$ * * * *	0.9959+-0.059978	114+-5
$N(1535)1/2^-$ * * * *	1.2535+-0.23877	128+-14
$N(1650)1/2^-$ * * *	0.19052+-0.080828	104+-10
$N(1675)5/2^-$ * * * *	0.072775+-0.0126	152+-7
$N(1680)5/2^+$ * * * *	1.1808+-0.05224	118+-6
$N(1710)1/2^+$ * * *	0.56018+-0.32318	200+-18
$N(1720)3/2^+$ * * * *	3.3891+-1.6398	420+-100
$N(1875)3/2^-$ * * *	0.06435+-0.063951	200+-25
$N(2060)5/2^-$ * * *	1.1664+-0.40369	375+-25
$N(2190)7/2^-$ * * *	0.79473+-0.17224	335+-40
$\Delta(1232)3/2^+$ * * * *	1.1111+-0.031101	110+-3
$\Delta(1600)3/2^+$ * * *	0.2256+-0.063419	220+-45
$\Delta(1620)1/2^-$ * * *	0.40437+-0.077764	130+-11
$\Delta(1700)3/2^-$ * * *	5.7183+-0.98023	310+-40
$\Delta(1905)5/2^+$ * * * *	0.30669+-0.055753	335+-18
$\Delta(1950)7/2^+$ * * *	1.1933+-0.081041	256+-10