

$^{209}\text{Bi}(p,p')$: giant resonance [1975Ma07](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. Chen # and F. G. Kondev		NDS 126, 373 (2015)	30-Sep-2013

[1975Ma07](#): E=155 MeV achromatic proton beam was produced Orsay synchrocyclotron. A target of 100 mg/cm² thick ^{209}Bi was used. Scattered protons were detected in the image plane of a magnetic analyzer by means of a proportional chamber, FWHM=200-250 keV, $\theta=8^\circ-20^\circ$, momentum transfer=0.4-1 fm⁻¹. Measured $\sigma(E_p, \theta)$. Deduced giant resonances, level width. Others: [1971Be32](#), [1972Le39](#).

 ^{209}Bi Levels

E(level)	L^\dagger	β_L	Comments
0.0			
9000	(2)	0.028	% energy weighted E2 sum rule=9.
10700	(2)	0.047	$\Gamma=2.2$ MeV $\langle r^2 \rangle^{1/2}=5.52$ fm. % energy weighted E2 sum rule=29.

[†] From DWBA analysis.