

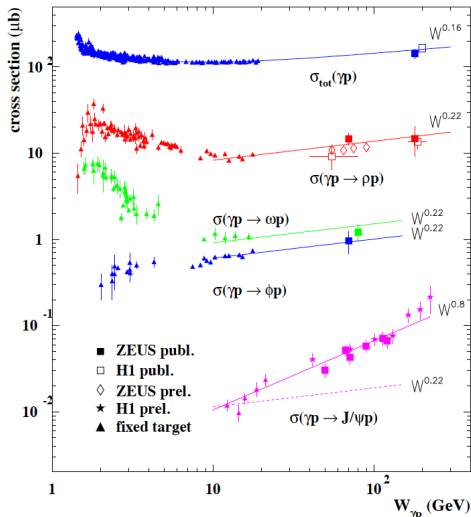
J/ψ Photoproduction at Threshold

GlueX Physics Working Group Meeting

August 10, 2015



Cross Sections: hep-ex/9712027



Threshold J/ψ : $E_{\gamma} = 8.21$ GeV

Threshold P_C : $E_{\gamma} \approx 9.8$ GeV

$\sigma_{\gamma p \rightarrow p J/\psi} (W \approx 4 \text{ GeV}) = 1 \text{ nb} ?$

Yield in 200 days:

$N_{J/\psi} \approx 40,000$

- integrated over hadronic decay modes, $\epsilon_{\text{MC}} \approx 5\%$

More realistically (still optimistic):

- $\sigma = 0.1 \text{ nb} ? \rightarrow N_{P_C} \approx 4,000$
- Photon Rate $\gtrsim ?$
- Decay Mode ?