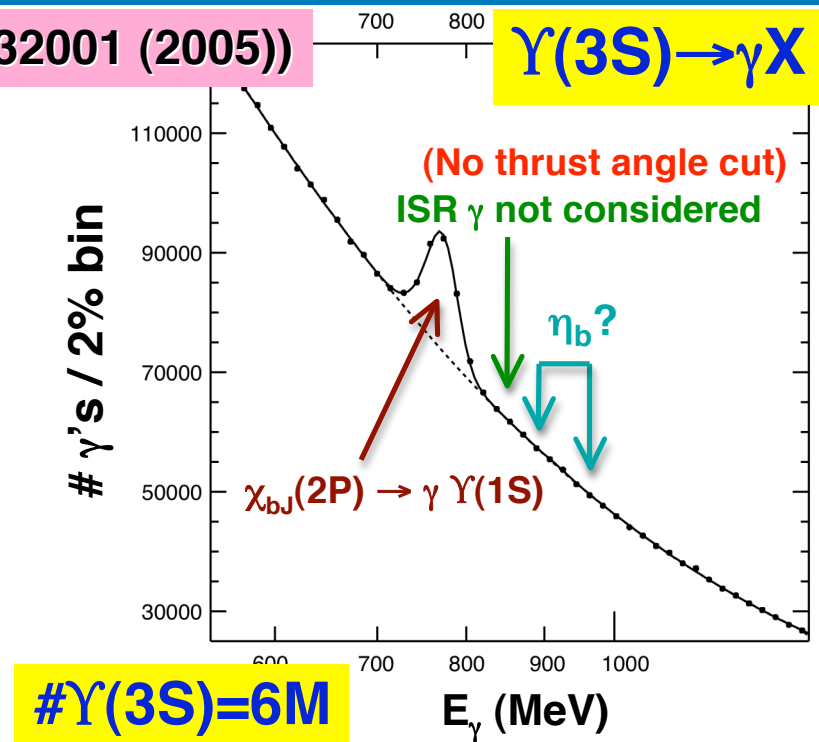
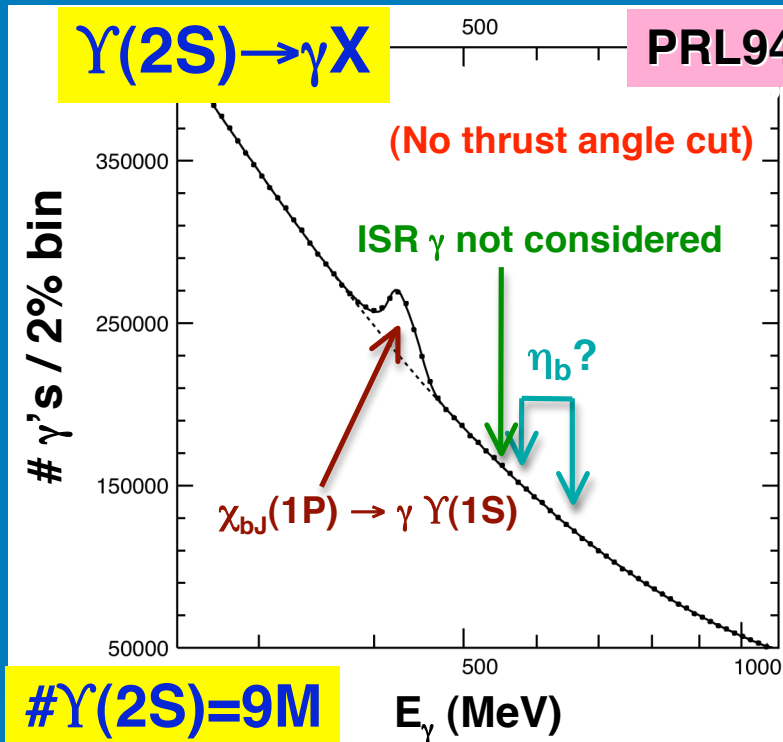


Search for η_b via hindered M1 transitions in CLEO-III data



- Searched inclusive $\Upsilon(2S,3S) \rightarrow \gamma X$
- Set ULs on these BRs at 90% CL
 - $B[\Upsilon(3S) \rightarrow \gamma \eta_b(2S)] < 6.2 \times 10^{-4}$
 - $B[\Upsilon(2S) \rightarrow \gamma \eta_b(1S)] < 5.1 \times 10^{-4}$
 - $B[\Upsilon(3S) \rightarrow \gamma \eta_b(1S)] < 4.3 \times 10^{-4}$
- Published limits to be corrected
 - Ignored ISR peak from $e^+e^- \rightarrow \gamma \Upsilon(1S, 2S)$
- Could improve sensitivity
 - Did not utilize information on angle of γ w.r.t. event thrust axis as did BaBar [PRL101, 071801 (2008)]
- **We are currently re-analyzing our data**