

# Polarization Overlaps using the Reaction



Volker Credé

Florida State University  
Tallahassee, FL

g8b Meeting

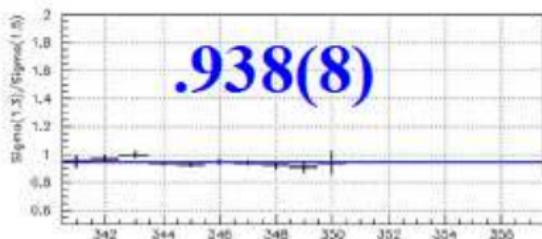
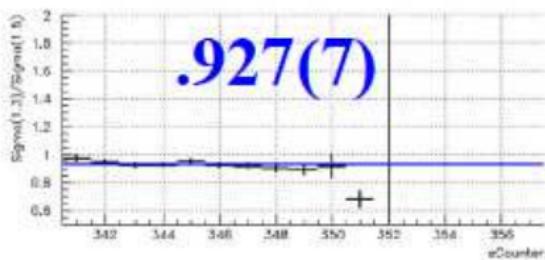
November 2, 2011

# Study of Overlap Regions using $\gamma p \rightarrow p \pi^+ \pi^-$

A word of caution: The  $\pi^+ \pi^-$  channel has usually good statistics.

→ Statistics used for the comparisons is cut out in regular analysis.

200 MeV Ecut



Consistent with Mike's studies:

- Events with ( $E_{\text{cut}} = 200 \text{ MeV}$ )

$$E_{\gamma} < (\text{eventEdge} - E_{\text{cut}})$$

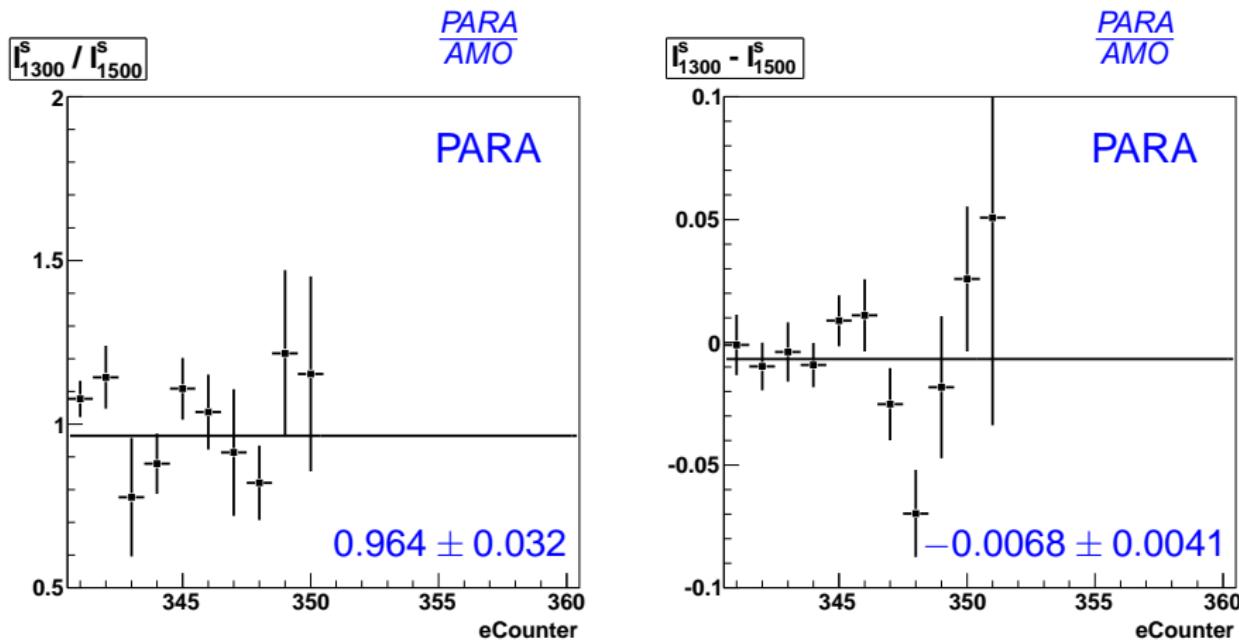
removed from analysis.

- x-axis is  $e\text{Counter}$ .
- I have not studied any other  $E_{\text{cut}}$  values.
- I have not studied any of the 1700 and 1900 AUTO files.

# Study of Overlap Regions using $\gamma p \rightarrow p \pi^+ \pi^-$

1.3 / 1.5

$$I = I_0 (1 + \delta_I (\sin 2\beta \cdot I^S + \cos 2\beta \cdot \Sigma))$$



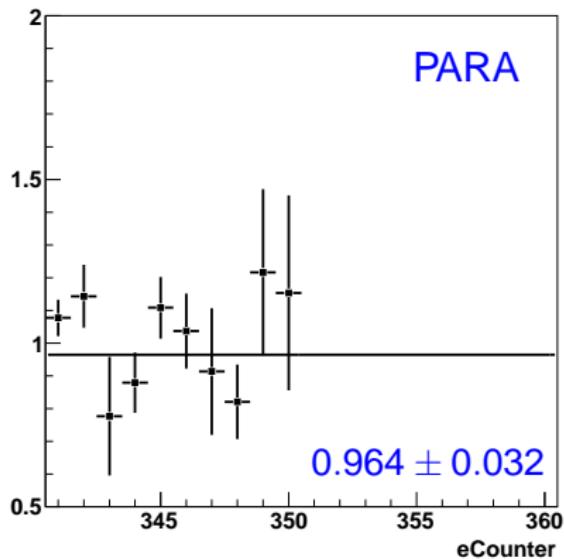
# Study of Overlap Regions using $\gamma p \rightarrow p \pi^+ \pi^-$

1.3 / 1.5

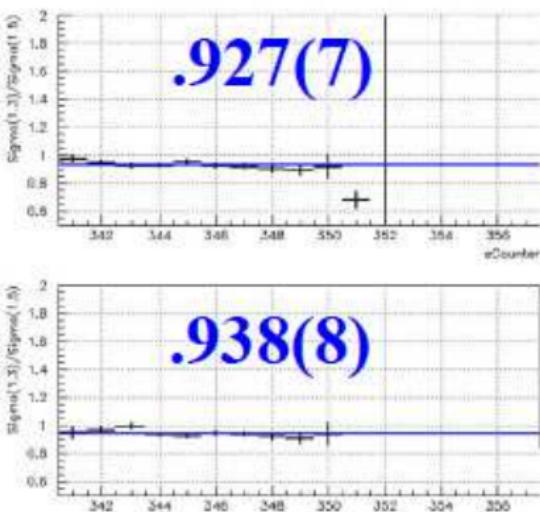
$$I = I_0 (1 + \delta_I (\sin 2\beta \cdot I^S + \cos 2\beta \cdot \Sigma))$$

$$\frac{I_{1300}^S}{I_{1500}^S}$$

PARA  
AMO



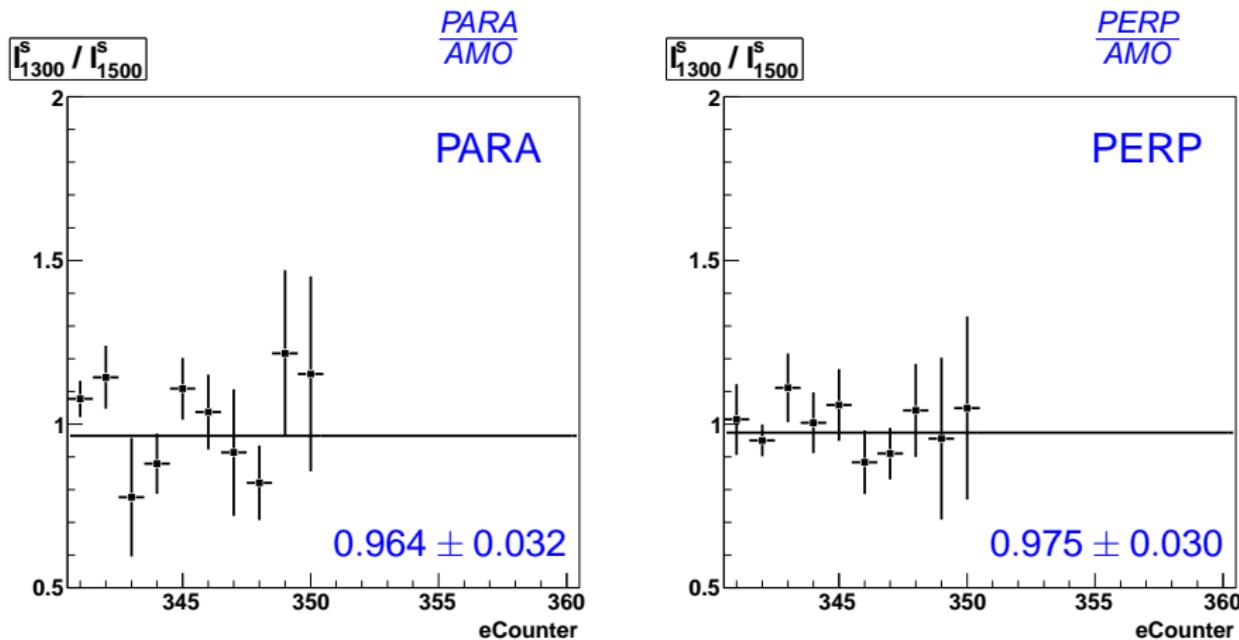
200 MeV Ecut



# Study of Overlap Regions using $\gamma p \rightarrow p \pi^+ \pi^-$

1.3 / 1.5

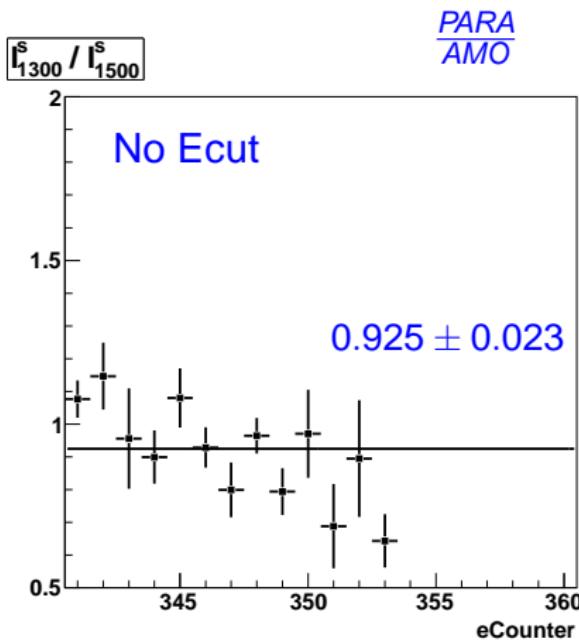
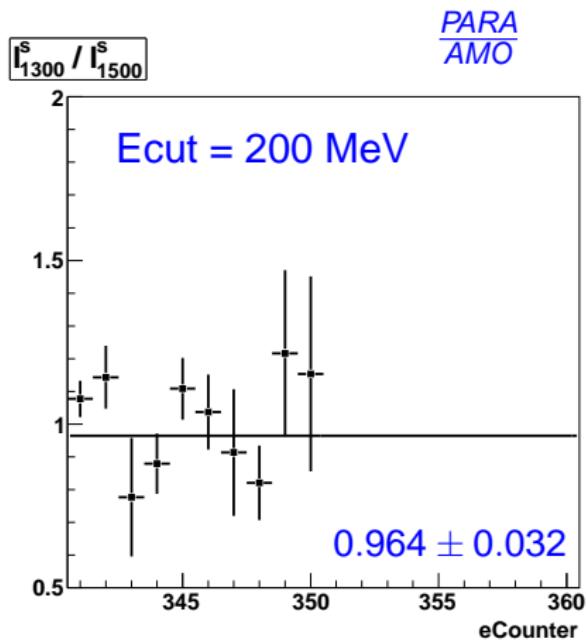
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# Study of Overlap Regions using $\gamma p \rightarrow p \pi^+ \pi^-$ \*

1.3 / 1.5

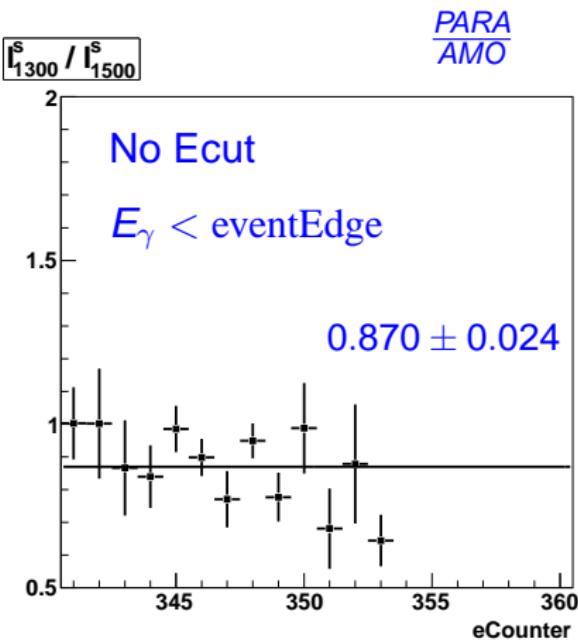
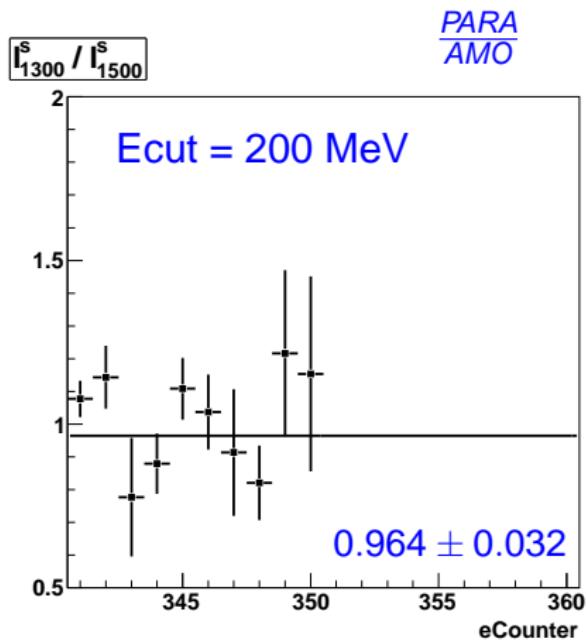
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# Study of Overlap Regions using $\gamma p \rightarrow p \pi^+ \pi^-$ \*

1.3 / 1.5

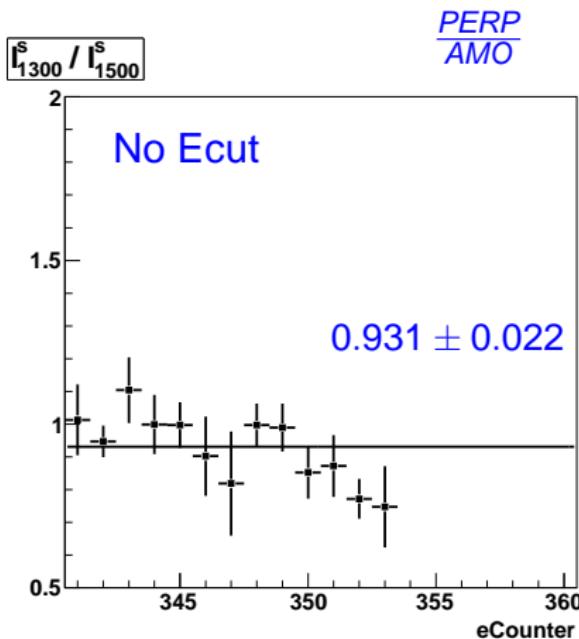
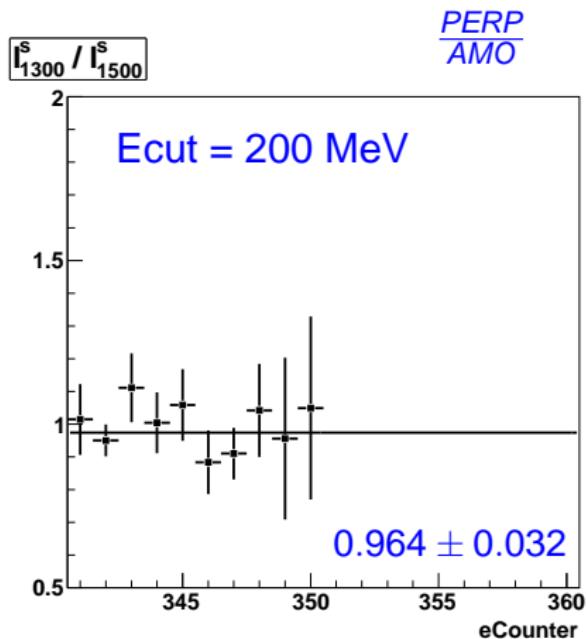
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# Study of Overlap Regions using $\gamma p \rightarrow p \pi^+ \pi^-$ \*

1.3 / 1.5

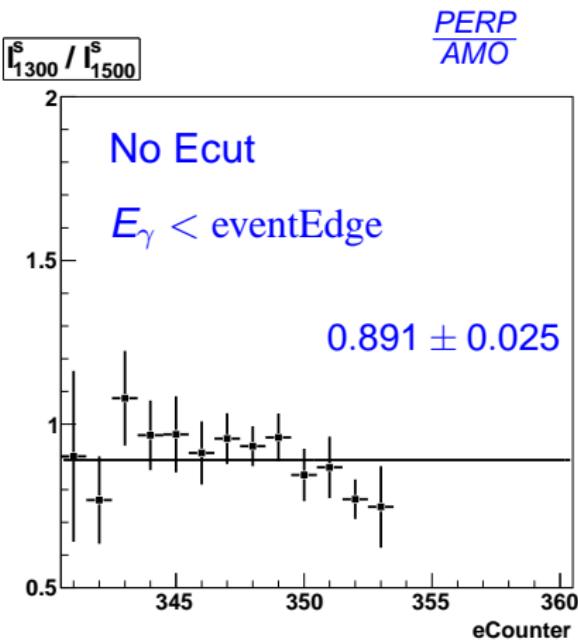
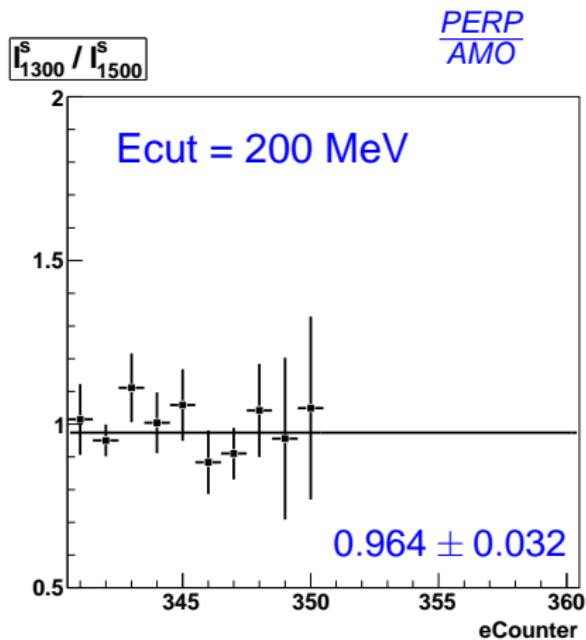
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# Study of Overlap Regions using $\gamma p \rightarrow p \pi^+ \pi^-$ \*

1.3 / 1.5

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# Study of Overlap Regions using $\gamma p \rightarrow p \pi^+ \pi^-$

1.3 / 1.5

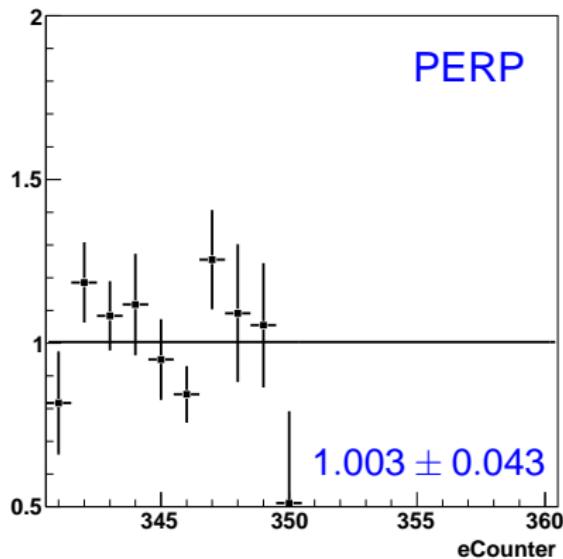
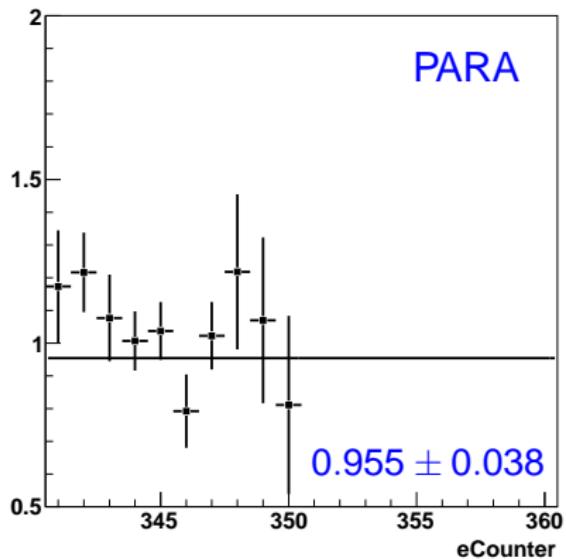
$$I = I_0 (1 + \delta_I (\sin 2\beta \cdot I^S + \cos 2\beta \cdot \Sigma))$$

$$\frac{\Sigma_{1300}}{\Sigma_{1500}}$$

*PARA*  
AMO

$$\frac{\Sigma_{1300}}{\Sigma_{1500}}$$

*PERP*  
AMO



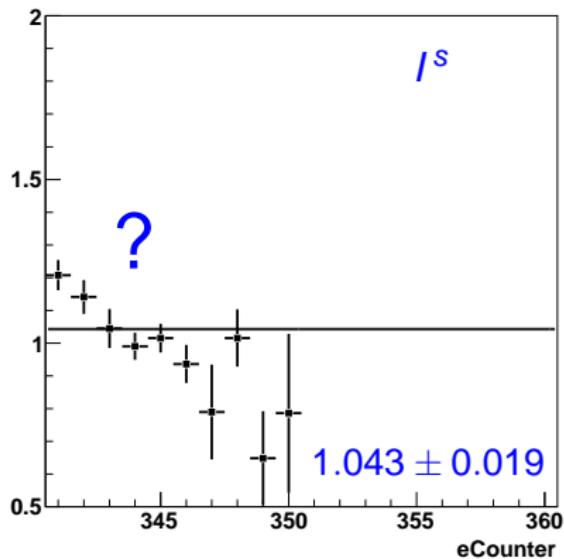
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1.3 / 1.5

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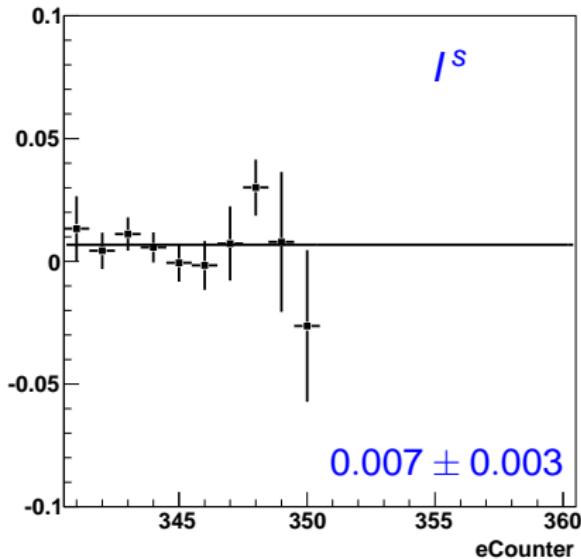
$$\frac{I_{1300}^S}{I_{1500}^S}$$

PARA-PERP  
PARA+PERP



$$I_{1300}^S - I_{1500}^S$$

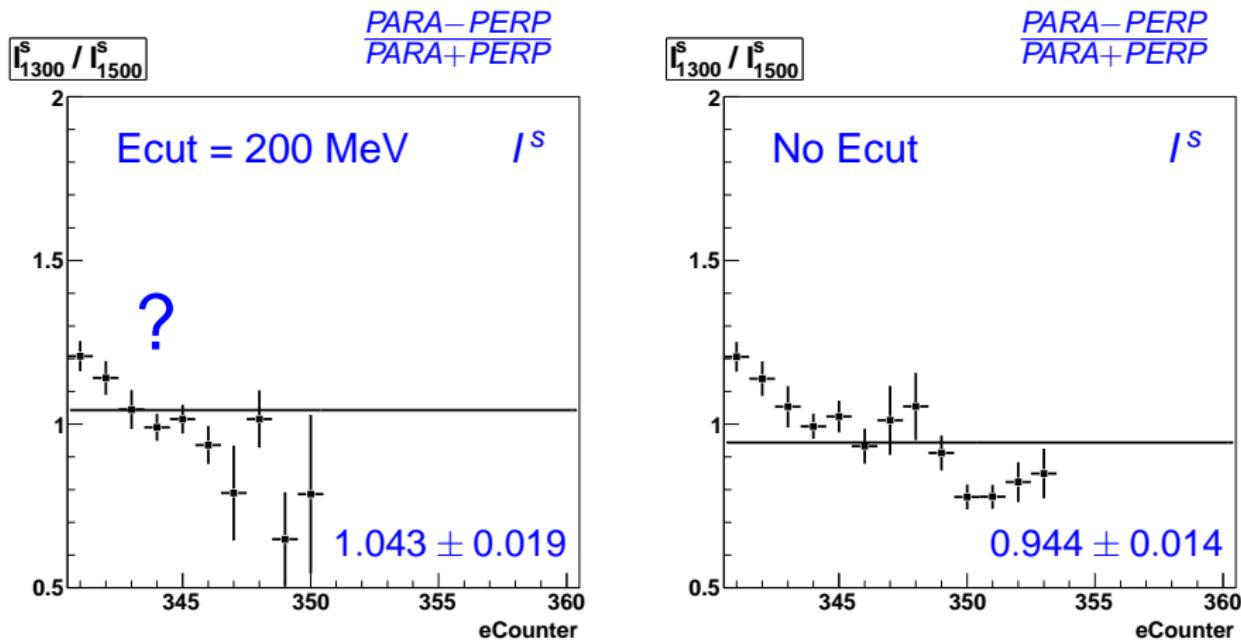
PARA-PERP  
PARA+PERP



# Study of Overlap Regions using $\gamma p \rightarrow p \pi^+ \pi^-$ \*

1.3 / 1.5

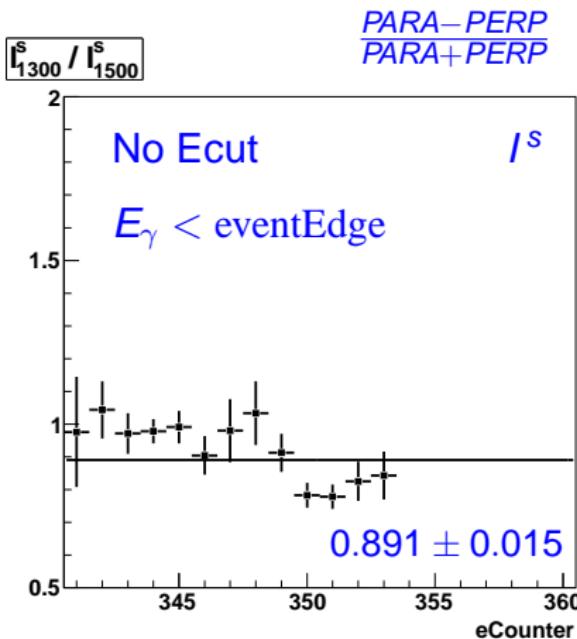
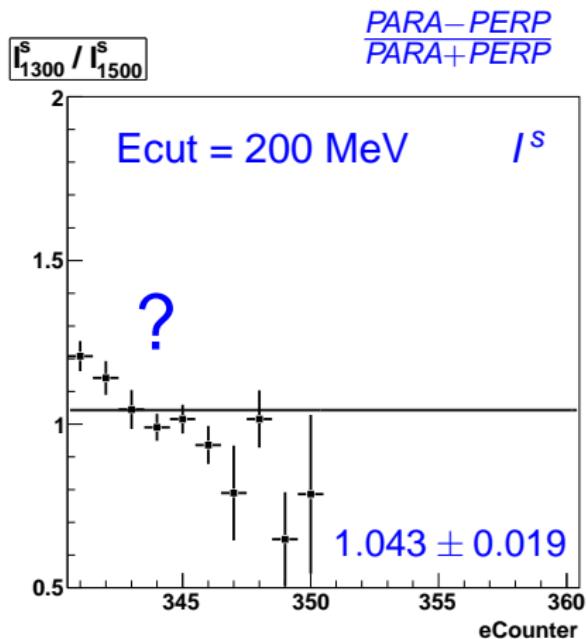
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# Study of Overlap Regions using $\gamma p \rightarrow p \pi^+ \pi^-$ \*

1.3 / 1.5

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# Study of Overlap Regions using $\gamma p \rightarrow p \pi^+ \pi^-$

1.3 / 1.5

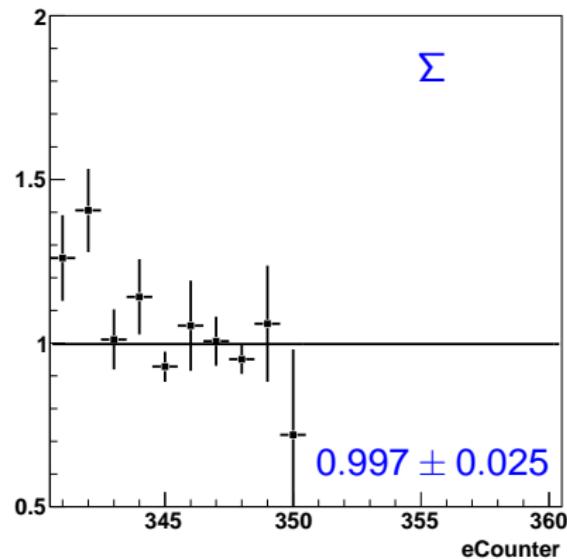
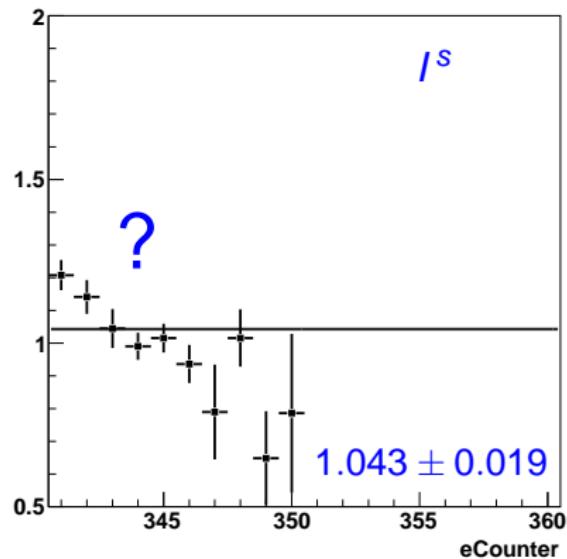
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$$I_{1300}^S / I_{1500}^S$$

PARA-PERP  
PARA+PERP

$$\Sigma_{1300} / \Sigma_{1500}$$

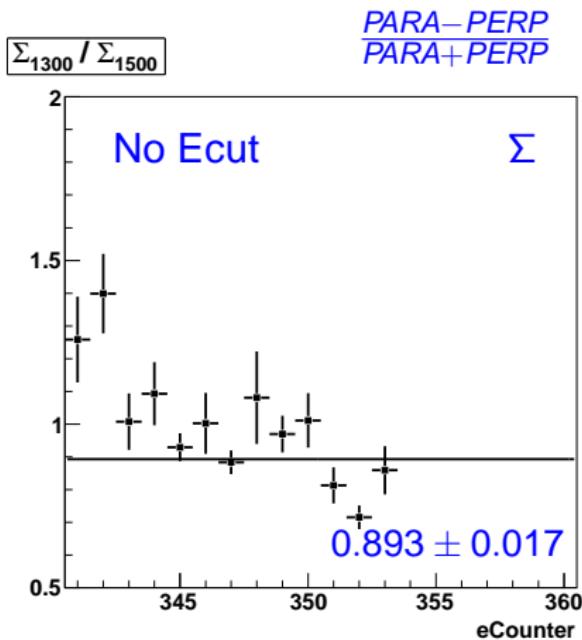
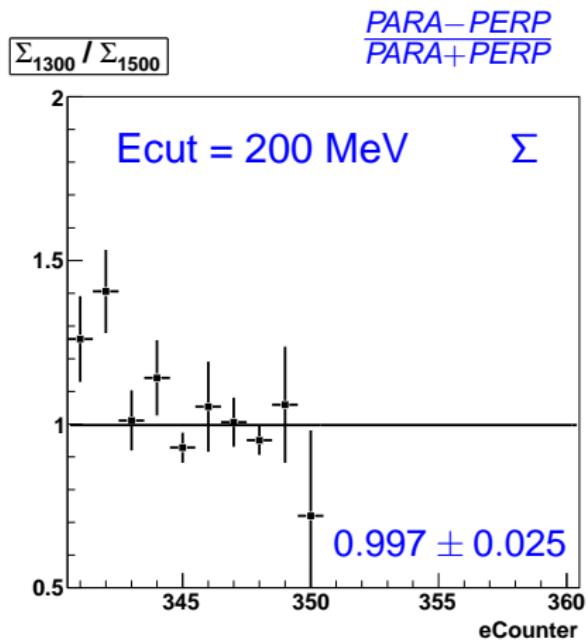
PARA-PERP  
PARA+PERP



Study of Overlap Regions using  $\gamma p \rightarrow p\pi^+\pi^-$  \*

1.3 / 1.5

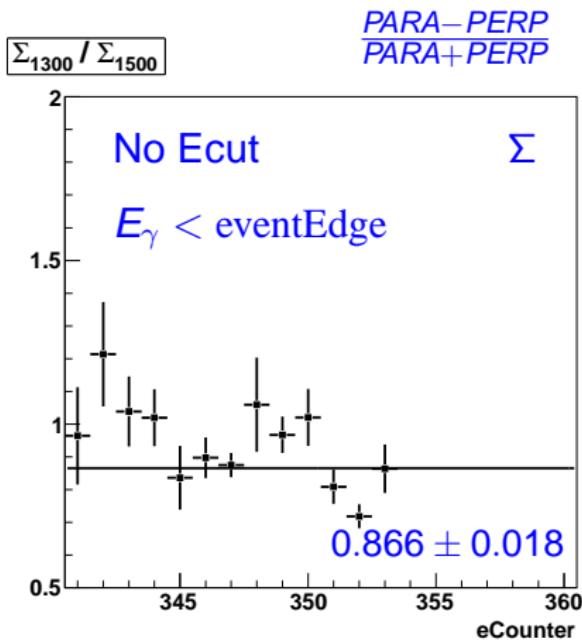
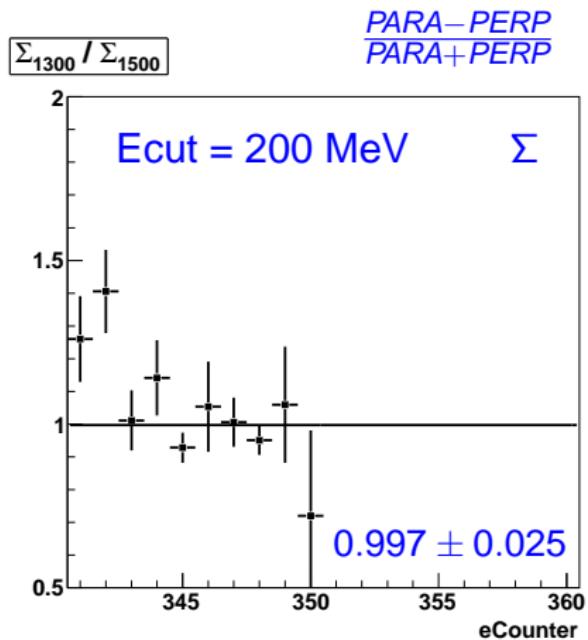
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Study of Overlap Regions using  $\gamma p \rightarrow p\pi^+\pi^-$  \*

1.3 / 1.5

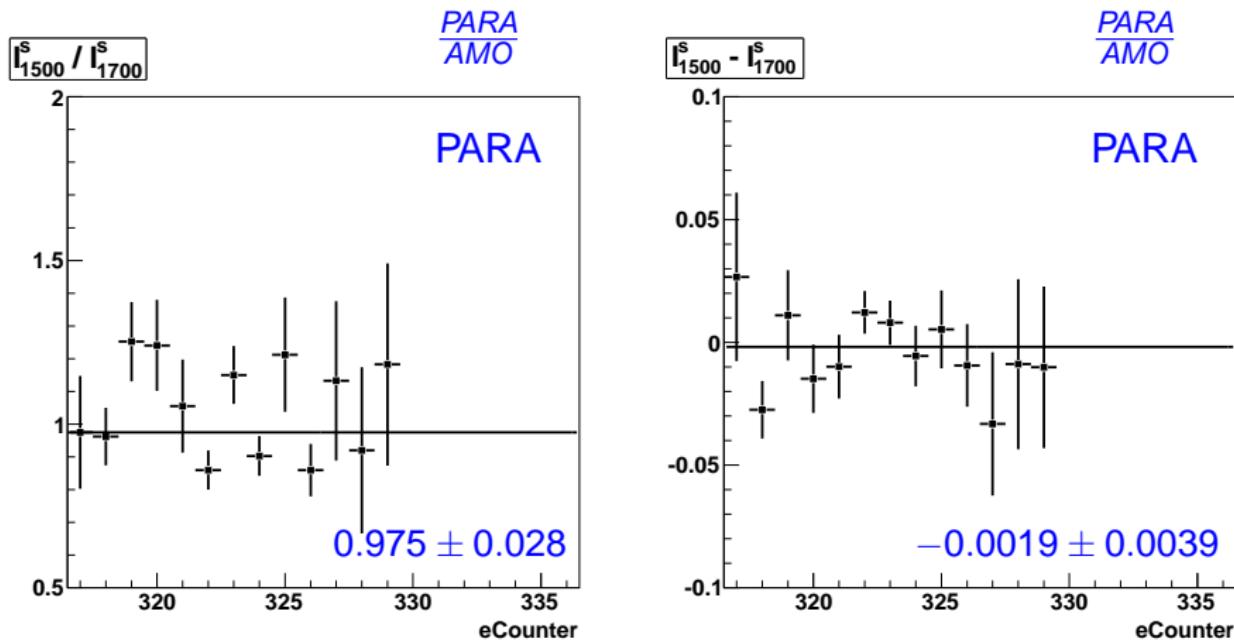
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# Study of Overlap Regions using $\gamma p \rightarrow p \pi^+ \pi^-$

1.5 / 1.7

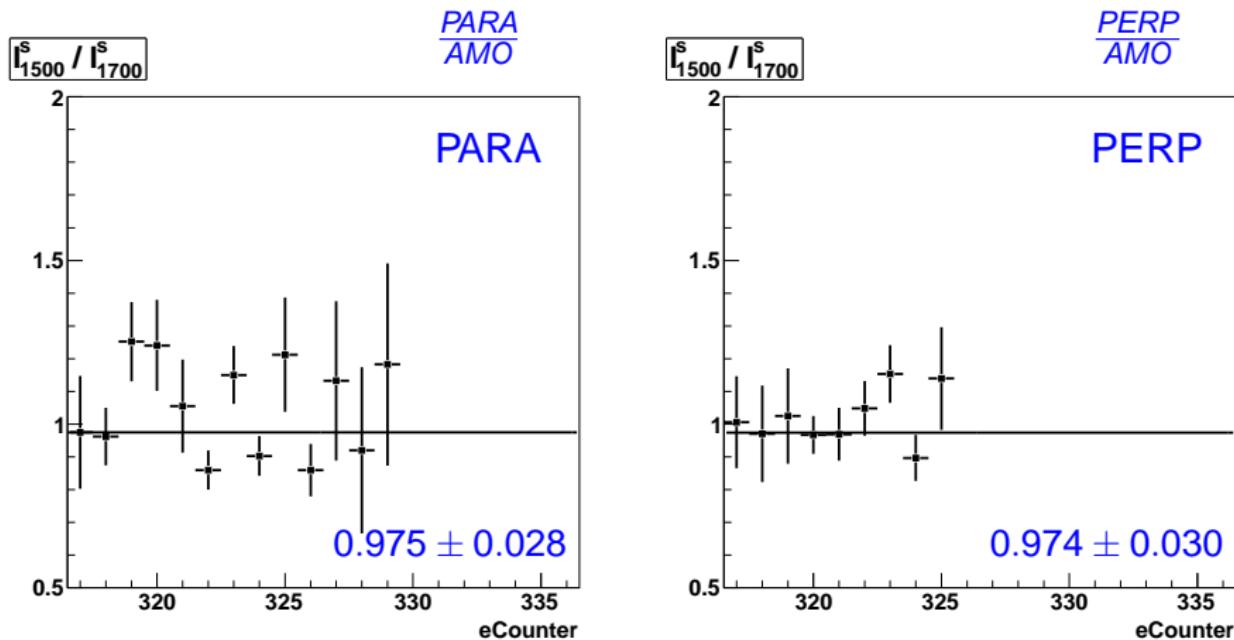
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# Study of Overlap Regions using $\gamma p \rightarrow p \pi^+ \pi^-$

1.5 / 1.7

$$I = I_0 (1 + \delta_I (\sin 2\beta \cdot I^s + \cos 2\beta \cdot \Sigma))$$



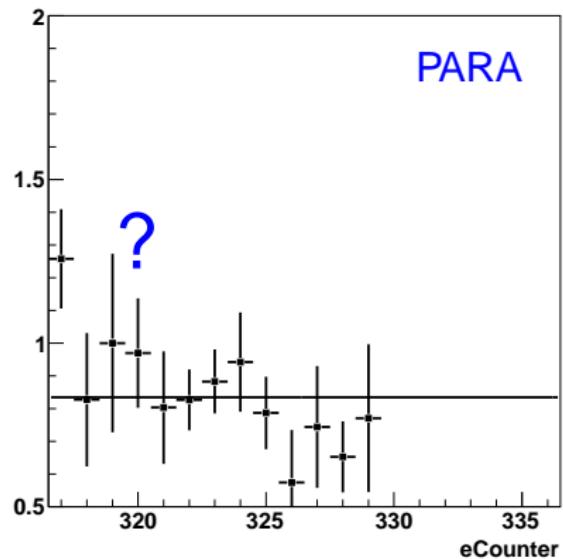
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1.5 / 1.7

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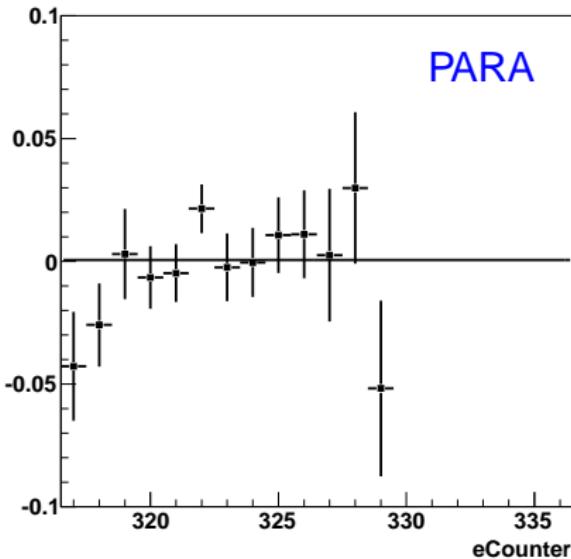
$$\frac{\Sigma_{1500}}{\Sigma_{1700}}$$

PARA  
AMO



$$\frac{\Sigma_{1500} - \Sigma_{1700}}{\Sigma_{1700}}$$

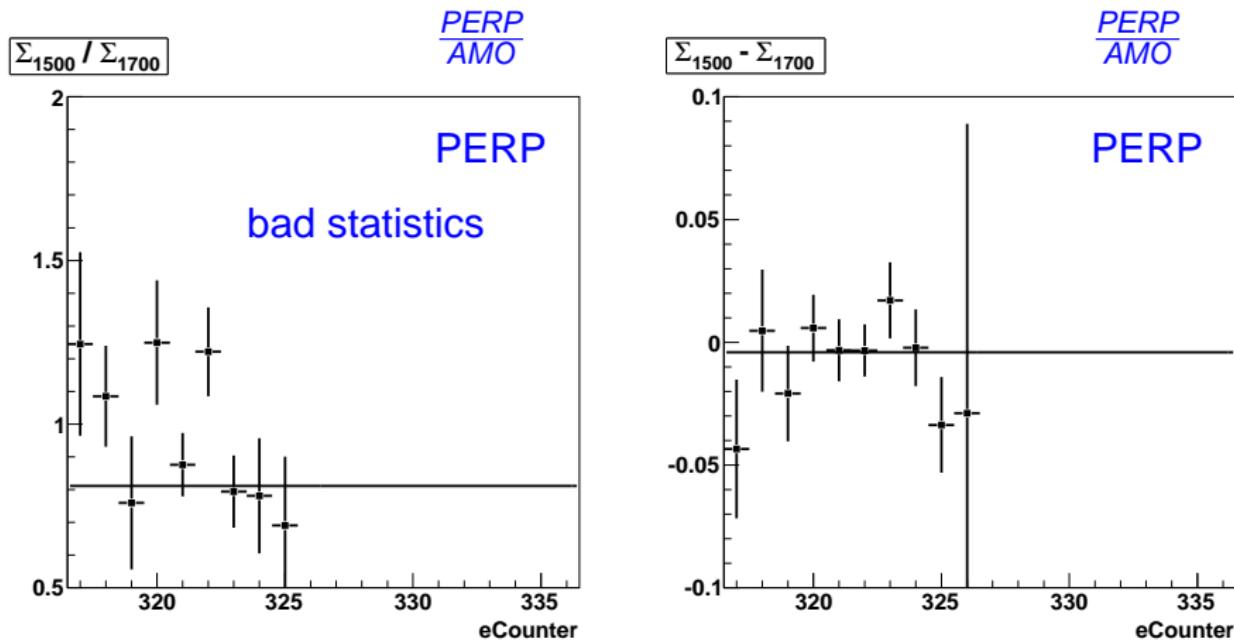
PARA  
AMO



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