



# Jefferson Lab Alignment Group Data Transmittal

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**DETAILS:**      data : aalign\Electron\2019\E042919 & Hadron\2019\H042919

Below are the results from the survey of the left and right spectrometer on April 29, 2019, 2019. The horizontal pointing value shows how much the central axis of the spectrometer misses the ideal target. This value is perpendicular to the spectrometer axis, not along the beam line. For the vertical pointing, a positive value indicates that the spectrometer is pointing above the target. A graphical sketch is shown at the end of this transmittal

===== RESULTS ===== E042919

The central ray of the spectrometer is at -12.509 degrees  
The central ray is missing the defined target center by 1.78 [mm] Downstream  
and -1.82 mm vertically [positive value is up]

If the offset is corrected by secondary alignment, the spectrometer will be at -12.521 degrees

To achieve this optimal setting make the following adjustments:  
spectrometer will be at -12.521 degrees

Horizontal corrections:  
Move rear jacks along tangent -1.81 mm Downstream

9 Par A posteriori value : 0.15 (mm)

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===== RESULTS ===== H042919

The central ray of the spectrometer is at 12.511 degrees  
The central ray is missing the defined target center by 1.90 [mm] Downstream  
and -2.98 mm vertically [positive value is up]

If the offset is corrected by secondary alignment, the spectrometer will be at 12.499 degrees

To achieve this optimal setting make the following adjustments:  
spectrometer will be at 12.499 degrees

Horizontal corrections:  
Move rear jacks along tangent -1.93 mm Downstream

9 Par A posteriori value : 0.24 (mm)

