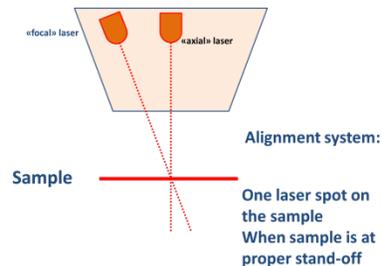


# ELIO XRF and Its Role in Cultural Heritage Diagnostics: Portability with Improved Accuracy

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ELIO is a tripod-mounted Portable XRF system which strives to strike the ideal balance between the portability of hand-held and the accuracy of desk-top spectrometers. Improved accuracy and precision is obtained in part by achieving the precise geometry through the adjustment of sample-stand-off such that two laser beams, one axial and one focal, become coincident:



Improved precision is obtained by 1) the repeatability of the geometry using the dual-laser alignment system; 2) the ability to achieve high counting statistics through the high rate (100-200 Kcps) analysis enabled by the unique SDD/Cube preamplifier system; and 3) the stability afforded by the tripod mounting to achieve appropriate counting times.

**MCI**  
*Topics in  
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**December 16, 2013**  
**1:45 pm**  
**Monday**

*MCI Theater*  
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