

# Lab 2: Lenses

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Lab Section: 3

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## 1 Objective

## 2 Theory

Uncertainty in a Function of Several Variables

$$\delta q = \sqrt{\left(\frac{\partial q}{\partial x}\delta x\right)^2 + \dots + \left(\frac{\partial q}{\partial z}\delta z\right)^2} \quad (1)$$

This was from An Introduction to Error Analysis by John R. Taylor equation 3.47 [1, p. 75].

### **3 Experimental Procedure**

### **4 Experimental Results and Analysis**

### **5 Conclusions**

## **References**

- [1] John R. Taylor. *An Introduction to Error Analysis: The study of uncertainties in physical measurements*. University Science Books, 1997.