Eksperimentel Fysik 2 - Experiment 1

# The Fresnel relations

Frederik Rosendal Rytter

Aarhus Universitet

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## 1 Introduktion

## 2 Theoretical background

Let f be a multi-variable function, such that

$$f(A, B, C) = Z$$

then, the standard uncertainty of Z, $\alpha_Z$, is a function of A, B, C and their respective uncertainties, $\alpha_A$, $\alpha_B$ and $\alpha_C$, such that:

$$(\alpha_Z)^2 = (\frac{\partial Z}{\partial A})^2(\alpha_A)^2 + (\frac{\partial Z}{\partial B})^2(\alpha_B)^2 + (\frac{\partial Z}{\partial C})^2(\alpha_C)^2$$

## 3 Experimental setup

## 4 Experimental data

## 5 Discussion

## 6 Conclusion

## Acknowledgements