

Uncertainty

GONDRO?

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$$\begin{cases} A \in [a - \Delta a, a + \Delta a] \\ B \in [b - \Delta b, b + \Delta b] \end{cases}$$

$$X = AB$$

$$X_{\max} = A_{\max}B_{\max} = (a + \Delta a)(b + \Delta b) = ab + a\Delta b + b\Delta a + \Delta a\Delta b$$

$$X_{\min} = A_{\min}B_{\min} = (a - \Delta a)(b - \Delta b) = ab - a\Delta b - b\Delta a + \Delta a\Delta b$$

$$\frac{\Delta X}{x} = \frac{X_{\max} - X_{\min}}{2x} = \frac{ab + a\Delta b + b\Delta a + \Delta a\Delta b - (ab - a\Delta b - b\Delta a + \Delta a\Delta b)}{2ab}$$