

- 30** A proton has a kinetic energy of 1.00 MeV. If its momentum is measured with an uncertainty of 1.00 %, what is the minimum uncertainty in its position?

A $1.23 \times 10^{-10} \text{ m}$

B $2.87 \times 10^{-12} \text{ m}$

C $5.71 \times 10^{-13} \text{ m}$

D $4.14 \times 10^{-19} \text{ m}$

End of paper