

- 26** Electrons and protons in two beams are travelling at the same speed. The beams are diffracted by objects of the same size.

Which correctly compares the de Broglie wavelength λ_e of the electrons with the de Broglie wavelength λ_p of the protons and the width of the diffraction patterns that are produced by these beams?

	comparison of de Broglie wavelength	diffraction pattern
A	$\lambda_e < \lambda_p$	electron beam width > proton beam width
B	$\lambda_e < \lambda_p$	electron beam width < proton beam width
C	$\lambda_e > \lambda_p$	electron beam width > proton beam width
D	$\lambda_e > \lambda_p$	electron beam width < proton beam width