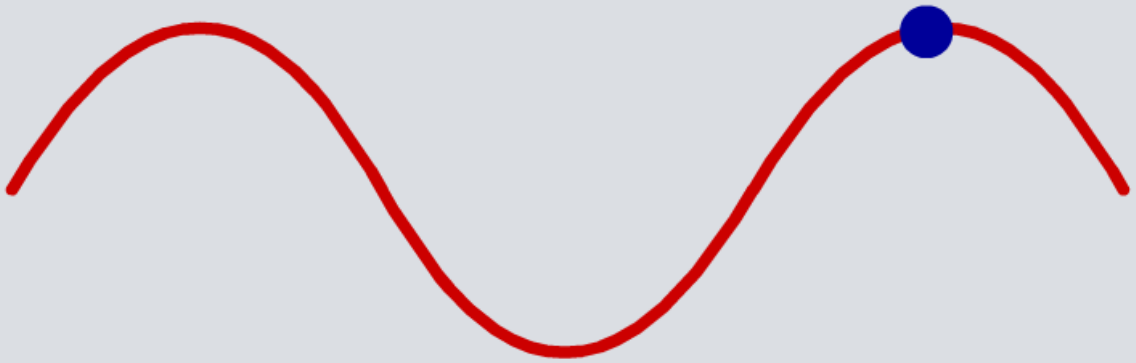
Wave Properties of Particles



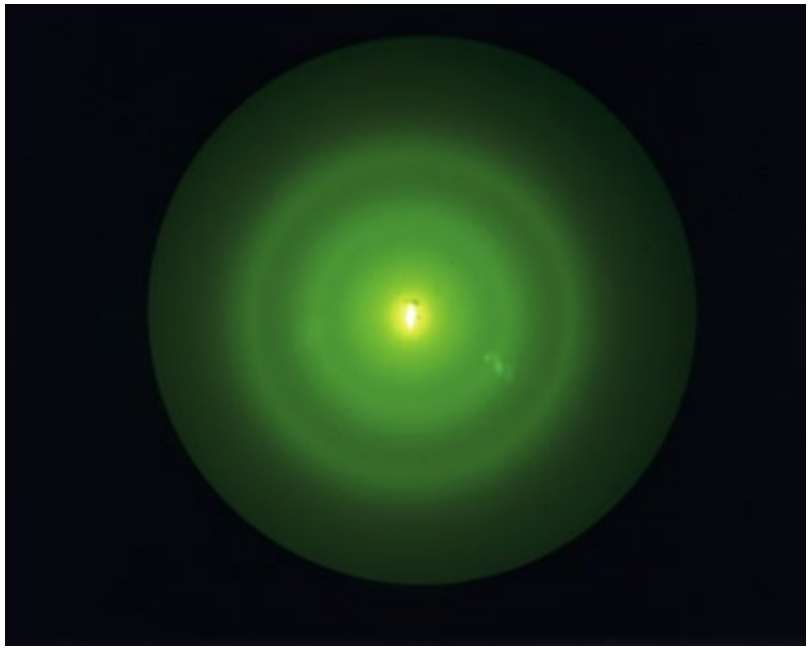
Wave properties of particles

In 1924, Lois De Broglie came up with a radical new way of looking at the relationship between waves and particles. He suggested that **all particles** could behave as waves.

De Broglie deduced that a particle had a wavelength, and it was dependent on only one thing – the momentum of that particle:

$$\lambda = h / p$$

Three years later, this hypothesis was confirmed for electrons with the first observations of **electron diffraction**.



Wave–particle duality

De Broglie wavelength calculations

Waves and particles