

Experimental Correlation:

Agreement of theory with experimental observation is very good i.e.

Spectral lines can be predicted generally with an accuracy of at least 1 in 10^4 and energy differences reproduce the observed spectra, if corrections are made for magnetic, relativistic and mass of nucleus effects.

- (ii) The analysis for hydrogen extends to hydrogen-like atoms
- (iii) A Fourier transform of the ground state of the wave function gives the momentum distribution in the atom. These probability distributions correlate well with studies in which an electron is ejected when a hydrogen atom is bombarded with an electron of known momentum.