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Contributors

Fuller, Watson, 1935-

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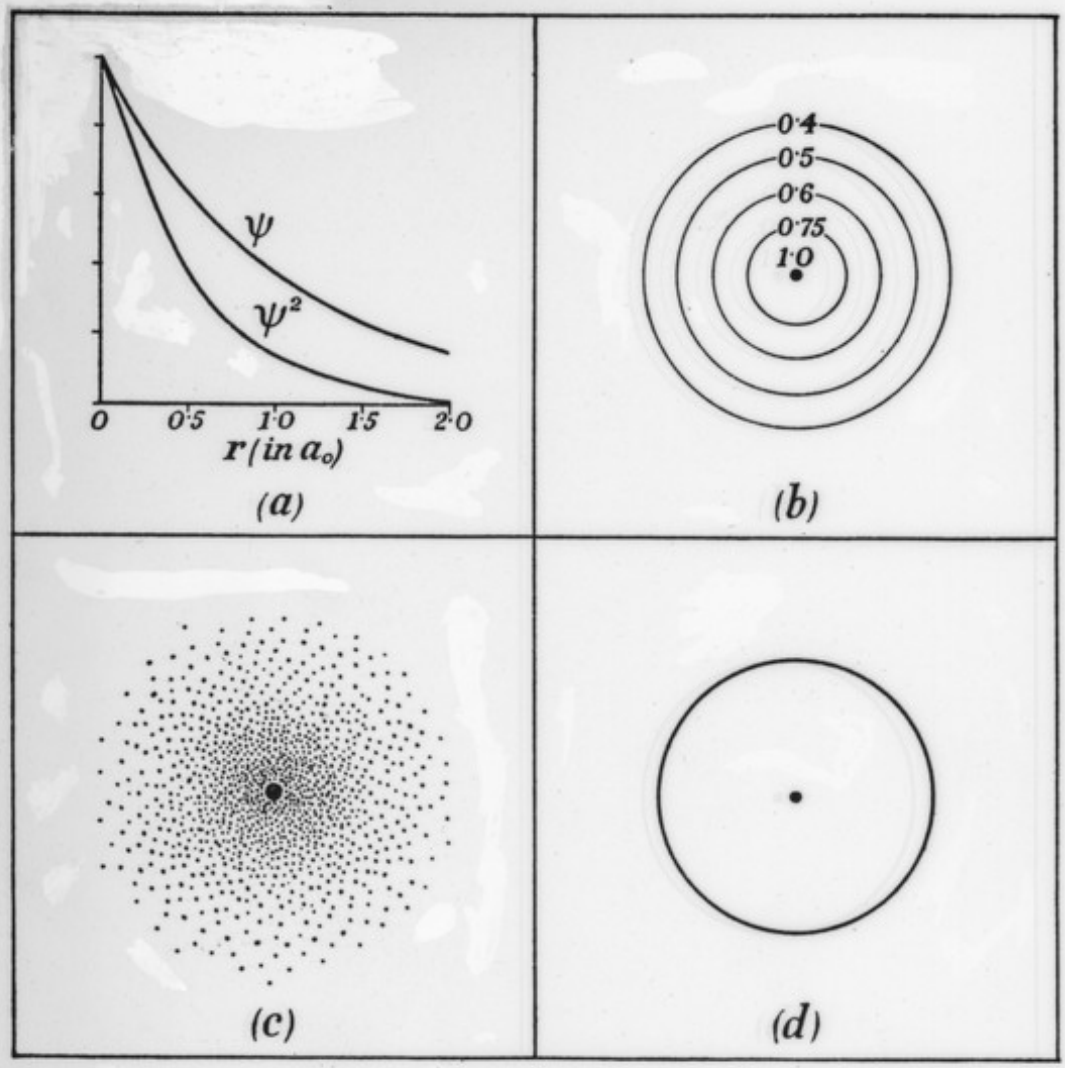
ngly adequate pictorial
quent use of it.
esenting the charge density
which is often used for atoms. Instead of plotting the density



Representation of the wave function for the ground state of a hydrogen atom.

(*a*) graph of ψ and ψ^2.
(*b*) contours of ψ.
(*c*) charge-cloud.
(*d*) boundary surface.

e plot what is called the radial density $4\pi r^2\rho(r)$. Since
is the volume lying between the two spheres r, $r+dr$, it follows that $4\pi r^2\rho(r)\,dr$ is the total probability that the electron is at a distance between r and $r+dr$ of the origin. Fig. 2 shows the graph of this radial density. It is interesting, by way of a