

Quiz #21 (The Hydrogen Atom Solutions)

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Quantum Mechanics

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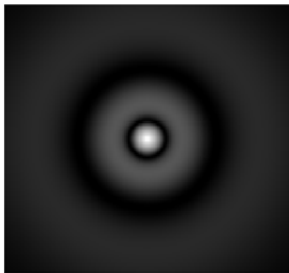
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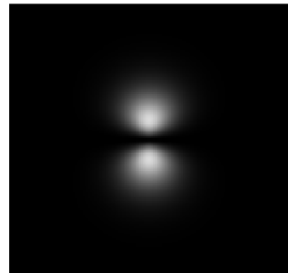
Prob. 1(6)

Determine the radial quantum number n and the angular momentum quantum number l for the hydrogen atom wave functions shown below. The figures show the wave functions on the x - z plane where $y=0$. Assume $m = 0$.

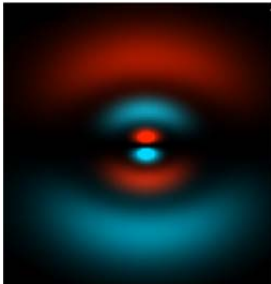
(a)



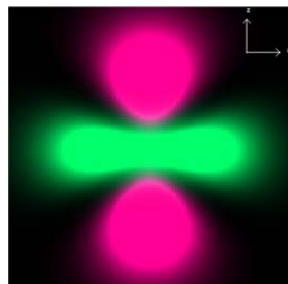
(b)



(c)



(d)



(e)

