



50× p> 7/2 hydrogen atom plot orbital 15 4100 Eground state] Wis [ Tras e /2]: a = Bohr radius 4,5 Increasing the round radius deacreses the State overall wave function because it is a decaying function peak is 17 probability r= bohr redius 1 Seany State Pohr model nucles electron 1=2 Spins amound [bohr nucleus redius nucleus state heisenberg Bohr model position & momentum uncertaint that both ere known but due to "probably" known.

greatest possibility of where electron Celection cloud] mid possibility of where D nucleus [ o possibility of ] greatest per q is bieneut st a laztion where redius is n that is nucles p probability deacresses 2s goes firther away Note In ground state, wave function is symmetric in 5 orbi densest [peak possibility] portion of e is called orbit /Shell Br = - 13.6eV higher n higher overall-1 subshells or obitals depend on orbital Jagunu unquell 1=1 P=0:5 nofe=2 15 25 46 S = 2 d= 1-06

0=1 A = 0,135, P 256 1-2 8=0,1,2; 5,P,d M 2,6,10 n=3 1=0,1,2,3',5,8,d, = 2,6,70,14 32 N 7=4