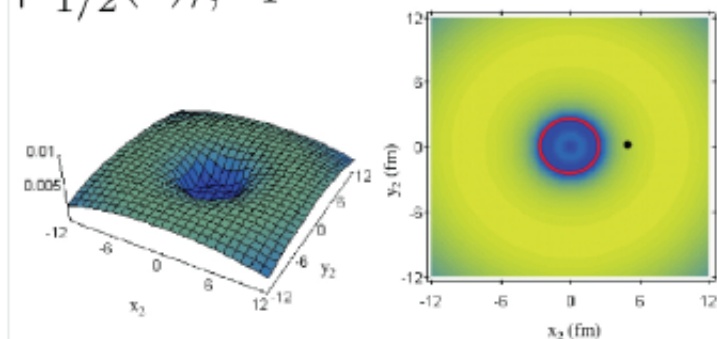


a) $|s_{1/2}^2(0)\rangle, r_1 = 5 \text{ fm}$



b) $|\tilde{0}\rangle = |0\rangle + 0.7 |(p_{1/2}, s_{1/2})_{1^-} \otimes 1^-; 0\rangle + 0.1 |(s_{1/2}, d_{5/2})_{2^+} \otimes 2^+; 0\rangle$

$r_1 = 5 \text{ fm}$

