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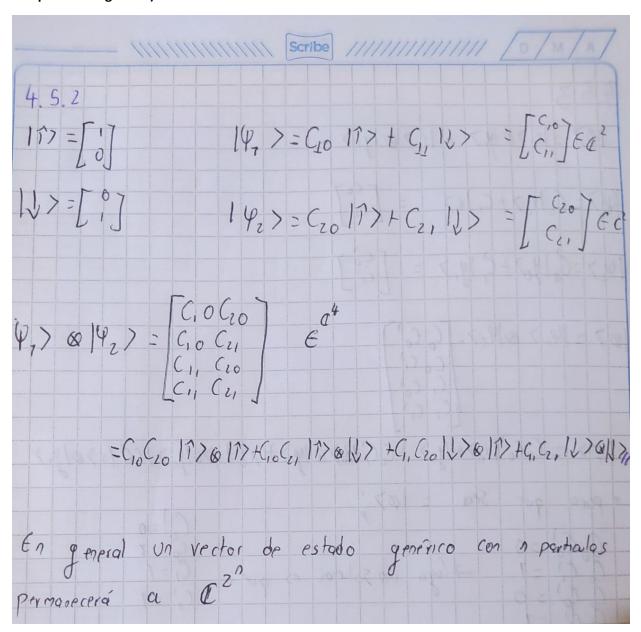
CNYT

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DOCENTE: Benavidez

Discusión problemas 4.5.2 y 4.5.3

4.5.2: Write down the generic state vector for the system of two particles with spin. Generalize it to a system with n particles (this is important: it will be the physical realization for quantum registers!).



4.5.3: Assume the same scenario as in Example 4.5.2 and let $|\phi>=|x0>\otimes|y1>+|x1>\otimes|y1>$. Is this state separable?

Scribe 4.53 107=1x07014,7 + 1x,7014,7 -14.7 = C. 1x,> = [c.7 1427 = Colyot + C, 19,7 = [co] 107 = 14, > 8/42>= [Co Co] (, (,) 10> = CoCo'1x07@1go> + CoCi1x07@14,>+CoCi1x,>@140>+CoCi1x,>@14,> · para que sea = 107; $\begin{array}{c} C_0C_0'=0\\ C_0C_1'=7\\ C_0C_1'=7\\ C_1C_0'=0\\ C_1C_1'=7\\ \end{array}$ $\begin{array}{c} C_0C_0'=0\\ C_1'=7\\ \end{array}$ $\begin{array}{c} C_1C_0'=0\\ C_1'=7\\ \end{array}$ to de esta monera si son separables y una posible solution es que 14,>=/x0>+1x,>=[:] 142>=14,>=507