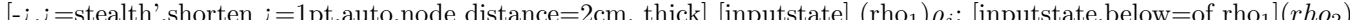
[-¿,¿=stealth',shorten ¿=1pt,auto,node distance=2cm, thick] [inputstate] (rho$_1$)ρ_j; [inputstate,below=of rho$_1$](rho$_2$)
[quantumswitch,right=of rho$_1$](switch$_1$)S, '−'; [ancilla, right = of switch$_1$](ancilla$_1$); [quantumswitch, below = of su
[outputstate,right=of ancilla$_1$](output$_1$)S, '−'; [ancilla, below = of output$_1$](ancilla$_3$); [outputstate, right = of ancilla
(rho$_1$)edgenode[above, align = center]E(ρ_j) (switch$_1$); (rho$_2$)edgenode[above, align = center]E(ρ_j) (switch$_1$); (rho$_3$)e
(rho$_1$)edgenode[above, align = center]E(ρ_j) (switch$_2$); (rho$_2$)edgenode[above, align = center]E(ρ_j) (switch$_2$); (rho$_3$)e
[-¿] (switch$_1$) − −node[above]C$_-$($\mathcal{E}(\rho_j)$) (output$_1$); [− >](switch$_2$) − −node[above]C$_-$($\mathcal{E}(\rho_j)$) (output$_2$);
[-¿] (ancilla$_1$)edge[bendleft = 20]node[above]'+'(output$_3$); [− >](ancilla$_2$)edge[bendright = 20]node[below]'-'(output$_4$